



# ***JPRS Report—***

# **Soviet Union**

---

***Economic Affairs***

# Soviet Union

## Economic Affairs

JPRS-UEA-91-028

### CONTENTS

13 JUNE 1991

#### NATIONAL ECONOMY

##### ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

Pavlov on Future Reform Steps [V. Pavlov; <i>EKONOMIKA I ZHIZN</i> No 10, Mar 91]	1
German Study Sees Inflation as Greatest Soviet Problem [HANDELSBLATT, 31 May 91]	4
Conversion in Aviation Sector Termed 'A' surd' [G. Dolzhenko; <i>RABOCHAYA TRIBUNA</i> , 25 May 91]	4
Partnership Is Base for Udmurtia Conversion Program [Moscow TV, 11 May 91]	6

##### INVESTMENT, PRICES, BUDGET, FINANCE

Decrease in Budget Deficit Unlikely [V. Panskov; <i>EKONOMIKA I ZHIZN</i> No 16, Apr 91]	7
--	---

##### INDUSTRIAL DEVELOPMENT, PERFORMANCE

Financing Problems at Magnitogorsk Metallurgical Plant [A. Yudin; <i>IZVESTIYA</i> , 31 May 91]	10
---	----

#### AGRICULTURE

##### AGRO-ECONOMICS, POLICY, ORGANIZATION

Excesses in Rush to Private Farming Lamented	12
Value of Kolkhoz Stressed [M. Sharov; <i>SELSKAYA ZHIZN</i> , 23 Mar 91]	12
Follow-Up: Farmer Only One Part of System [N. Petrenko; <i>SELSKAYA ZHIZN</i> , 18 May 91]	13
Moscow Area Farms Contracting Harvest Workers in Advance [Moscow TV, 18 May 91]	13
Reader's Letter Calls for Creation of Peasant Bank [A. Chureyev; <i>SELSKAYA ZHIZN</i> , 4 Jun 91]	13

##### REGIONAL DEVELOPMENT

Belorussia, Moldova Address Land Ownership Questions	14
Belorussian Academician on Peasant Farming [G. Lych; <i>BELORUSSKAYA NIVA</i> , 28 Mar 91]	14
Moldovan Deputy on Multiplicity of Forms [V. Lebedev; <i>SOVETSKAYA MOLDOVA</i> , 3 May 91]	16

##### POST-PROCUREMENT PROCESSING

Animal Product Procurements Decline [SELSKAYA ZHIZN, 24 May 91]	18
---	----

#### AGROTECHNOLOGY

Grain Requirements, Utilization Discussed	19
Imports vs Domestic Sufficiency [S. Skoropanov; <i>BELORUSSKAYA NIVA</i> , 26 Feb 91]	19
Milashchenko Interviewed [N. Milashchenko; <i>SELSKAYA ZHIZN</i> , 22 May 91]	22

#### LAND RECLAMATION, WATER MANAGEMENT

Reservoir Not Drained, Flooding Results [V. Goncharov; <i>SELSKAYA ZHIZN</i> , 15 May 91]	24
---	----

**CONSUMER GOODS, DOMESTIC TRADE  
POLICY, ORGANIZATION**

Consumer Group Federation VP Discusses New Protection Law <i>[M. Polyacheck; TRUD, 25 May 91]</i> .....	26
--	----

**ENERGY**

**FUELS**

Oil Production Improvements Examined <i>[N. Baybakov; NEFTYANOYE KHOZYAYSTVO No 2, Feb 91]</i> .....	27
Natural Gas Field Discovered Near Murmansk <i>[Moscow Radio, 19 May 91]</i> .....	30

**ELECTRIC POWER GENERATION**

Officials Counter Claims of Chernobyl Reactor Containment Dangers <i>[Yu. Cherkashov, V. Shikalov; GLASNOST No 18, 1 May 91]</i> .....	30
Officials View Armenian Power Generation, Ecological Requirements <i>[G. Santuryan, P. Kyalyan; GOLOS ARMENII, 10 Apr 91]</i> .....	31
Kola AES Exemplifies Benefits of Nuclear Power <i>[N. Kozlova; RABOCHAYA TRIBUNA, 22 May 91]</i> .....	33

**CONSERVATION EFFORTS**

Fuel Conservation Program Faulted <i>[D. Shabanov, V. Grishin; EKONOMIKA I ZHIZN No 12, Mar 91]</i> .....	35
--	----

**LABOR**

USSR Law on Resolving Individual Labor Disputes <i>[IZVESTIYA, 18 May 91]</i> .....	37
USSR Law on Amendments to Labor Legislation <i>[IZVESTIYA, 18 May 91]</i> .....	41
Resolution on Enacting Labor Laws <i>[IZVESTIYA, 18 May 91]</i> .....	45
USSR Law on Resolving Collective Labor Conflicts .....	45
Text of Amendment <i>[IZVESTIYA, 31 May 91]</i> .....	45
Text of Law <i>[IZVESTIYA, 31 May 91]</i> .....	46
Resolution on Enactment of Law <i>[IZVESTIYA, 31 May 91]</i> .....	48
Deputy Shalayev Explains Law <i>[S. Shalayev; TRUD, 31 May 91]</i> .....	49
Costs of Labor Movement "Crisis" Assessed <i>[L. Gordon; ROSSIYSKAYA GAZETA, 7 Mar 91]</i> .....	50
INTERFAX Feature Views 1990 Cooperatives <i>[INTERFAX, 24 May 91]</i> .....	52
Strikes Hit Start of Lena River Shipping Season <i>[Moscow Television, 30 May 91]</i> .....	53
Chemical Industry Workers' Grievances Reported <i>[N. Grineva; TRUD, 25 May 91]</i> .....	54
Cabinet Aids Aviation Workers, Students <i>[RABOCHAYA TRIBUNA, 22 May 91]</i> .....	55

**TRANSPORTATION**

**CIVIL AVIATION**

Brest Airport Becoming International <i>[Minsk Radio, 21 May 91]</i> .....	56
Largest Amphibious Aircraft Built in Taganrog <i>[B. Kurtser; TRUD, 4 Jun 91]</i> .....	56

**RAIL SYSTEMS**

New Kazakh Transport Minister on Relationship With Rail Ministry <i>[N. Isingarin; GUDOK, 8 May 91]</i> .....	56
Dnepr Railroad Chief on Change to Market Economy <i>[R. Yevdokimenko; GUDOK, 24 May 91]</i> .....	58
Deputy Rail Minister Interviewed on Personnel Issues <i>[B. Nikiforov; GUDOK, 21 May 91]</i> .....	61
Workers' Wages, Rail Tariffs Discussed <i>[V. Chistov; GUDOK, 7 May 91]</i> .....	63
First-Quarter Rail Safety Statistics Issued <i>[GUDOK, 14 May 91]</i> .....	64
New Minister Surveys Aging Rail Fleet <i>[A. Loginov; GUDOK, 21 May 91]</i> .....	66

Railway System Modernization Needs, Budget Constraints Viewed <i>[N. Davydov; GUDOK, 18 May 91]</i> .....	67
Railway Automation Problems Highlighted [Yu. Beloborodov; GUDOK, 8 May 91] .....	69
Trans-Siberian Rail Line Centenary Noted [A. Batygin, A. Streltsov; PRAVDA, 24 May 91] .....	70

## MARITIME AND RIVER FLEETS

Pavlov Attends Talks on Leningrad Docks, Shipping [Leningrad Maritime Service, 26 May 91] ...	71
---	----

## ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

### Pavlov on Future Reform Steps

914A080LA Moscow *EKONOMIKA I ZHIZN*  
in Russian No 10, Mar 91 p 4

[Interview with USSR Prime Minister V. S. Pavlov, by V. Maleyev and Yu. Yakutin, under rubric: "Pertinent Dialogue: "Reform: Strong Points"]

[Text]

[Interviewer] Valentin Sergeyevich, what is your attitude toward the participation of foreign specialists in the development of economic programs and toward inviting them to participation in the administration of the country's economy and of Soviet enterprises?

[V. Pavlov] Participation in the development of programs is one thing, but participation in the administration of the country is another. We never objected to having consultations with foreign specialists. Last year, when the program for transition to the market was being prepared, in response to an invitation from the government we were visited several times by scientists and specialists from various countries in the West. And I do not see anything extraordinary in that. Anyone's experience is beneficial. But I am also convinced that the mechanical transferral of other people's experience to our soil cannot cause anything but harm. Every country has its own national, natural, psychological, and many other peculiarities. It is necessary to study any kind of experience, but it is also necessary to see the extent to which it can become acclimatized under our conditions.

As for the administration of specific enterprises, we feel that in specifically this area it would not be detrimental for us if the joint enterprises that have been created and that are being created were administered from the outset by foreign specialists. Although it would be beneficial if Soviet specialists were also alongside as co-directors. In order to work under our country's conditions, foreign experience in its pure form may not be enough. An economic system such as ours must be known from the inside out, in order to resolve a particular question. In the final analysis we assume that, when we want to cooperate with someone, we attempt to learn something. If someone simply comes and begins to administer, then we will have only output. That is good, but it is not enough, because we also need output in the form of knowledge.

[Interviewer] What level of income, in the opinion of the Cabinet of Ministers, will be considered sufficient after the price reform, beginning with which a person will not be paid compensation?

[V. Pavlov] The government's proposals do not contain any limitations at all. We proceed from the assumption that the compensations must proceed through the earnings. The fact of the matter is that we propose beginning

the price reform simultaneously with the reform in payment of labor. If we drop the prices but maintain the earnings, we will not get any market. Without a labor market, there simply cannot be a complete market.

Among the first steps in the transition to the market I consider that one of the key steps is the equalizing of the starting-line conditions for the enterprises and organizations primarily in the nonproduction sphere. Here we are proceeding toward a conscious redistribution of the funds that will come from raising the retail prices, to the benefit of that sphere. It is precisely by virtue of the fact that it is simply impossible for any compensations to eliminate the current starting-line inequality.

[Interviewer] To what extent has there been a change in the structure of the cabinet as compared with the previous government? Are you planning to leave the basic branch ministries? To what extent is the further existence of the ministries in the national economy compatible with the market?

[V. Pavlov] We analyzed very carefully the question of the ministries, various kinds of commissions, bureaus... And we began to eliminate the links that had previously been involved directly in the administration of production wherever we were convinced that there would not be any "avalanche" loss of control. But it is necessary to consider the fact that the present structure of the cabinet is a structure for the transitional period. It is not the final version.

The present structure contains agencies that have the names of ministries that used to exist, that exist now, and that will exist as long as the state exists. We have in mind the Ministry of Foreign Affairs, the Ministry of Internal Affairs, the Ministry of Defense, the Ministry of Finance. These are the so-called functional ministries. They exist in all states, irrespective of the system. We have also retained by name several production ministries, although they will have a completely different content. And we have also retained several ministries which we cannot eliminate for technical reasons. Centralized administration will continue to exist in power engineering, in transportation, at nuclear power plants, and in weapons production.

Actually, from among the purely civilian ministries we have retained only one—the ministry of motor-vehicle and agricultural machine building. The fact of the matter is that, although the process of demonopolization is also occurring there, it will take several more years. But the functional ties are so rigid and so close that we were not able, on the move, to break them or to find an equivalent replacement. I had a special meeting with the managers of all our major motor-vehicle giants and tractor builders. They were unanimous in stating that, as of today, the ministry should not be broken up. It is not preventing them from administering, but at the same time is helping to preserve the cooperative ties.

I repeat that the process of demonopolization in the branch is proceeding actively. But we feel that, with

those great structural changes in the economy that are ahead, it is still necessary to remember the physician's chief commandment, "Do not inflict harm."

As for the compatibility of the ministry and the market, everything depends upon what functions those ministries will have. They must evolve from the condition that the enterprises must be assured that no one will interfere in their economic activity. For example, starting this year the intrabranch redistribution of funds, the centralized distribution of material resources, has been eliminated. That is, those levers that were previously used by the ministries no longer exist.

But at the same time I want to say that a very large number of people have proven to be unready for this turn of events. Strange as it seems, they remember the ministries very warmly and propose a return to certain central structures of administration. And one cannot feel that that proposal is completely devoid of meaning. The enterprises have not been prepared for the market conditions. Take the question of branch science. Every year an amount of the order of seven billion rubles was expended on scientific-research and experimental-design projects. But today the ministries have stopped financing those projects in a centralized manner. But the individually taken enterprises, even the major associations, have not been been rushing very much to take orders for long-range projects. A "rub-down" process is still going on, and it is possible that the branch science will be lost. Who will replace the ministries in this sphere?

At the present time we are attempting to find an answer in the person of the Ministry of Science, Technology, and Technological Schemes. It is not yet possible to give an unambiguous answer to the question of whether it will be able to assume, in addition to the fundamental research, together with USSR Academy of Sciences, this sphere also.

[Interviewer] There have been a large number of forecasts and rumors relative to the further steps to be taken by the Cabinet of Ministers. Here are two of them. People say that an ukase is being prepared, according to which the enterprises will be required within a 30-day period to return to Vneshekonombank [Bank for Foreign Economic Activity] the currency that they invested abroad. And, second, that the government is planning to stop people from going abroad in response to invitations, because, once again, there is no currency. Could you comment on those rumors?

[V. Pavlov] It has always been like this in our country. Someone has heard something, and then the information returns to the originator in such a form that it is already difficult to recognize it. We have discovered that today many of our exporters are not returning to the country their currency proceeds. It is not a matter of whether they have invested that money wisely. Because we hail the creation of joint enterprises abroad. But when the enterprises that export output from the country also leave the money there, that of course is something that

we do not like. In any country that would cause alarm. One should not forget that a large amount of labor performed by the subcontractors has also gone into the makeup of the export output. And everything does not belong just to those who have acted as the final seller. For the sake of justice, to a large extent that currency should be used to meet the country's needs also. But at the present time the currency remains in foreign banks. This introduces yet another inflationary factor. We pay for the work in rubles, but we do not receive any proceeds from the sale of the output. As a result we assume that our enterprises that are selling output abroad must definitely return the currency to the accounts in Soviet banks.

Naturally, we are not planning to force enterprises to return to the country all the funds, including those funds that are necessary there for normal business operations—for the purchase of raw and other materials. But if there are instances when the currency is being deliberately held onto there and is being lent out at interest, which contradicts the activities of the enterprises as stated in their charters, then that will be discontinued.

If one speaks of the reaction in the business world, I would like to take a look at a bank that would undertake to serve a customer who would take money only for expenses, but would take his proceeds to another banker. You could not work for long in this way. It is necessary to observe the ironclad principle: "one customer, one bank."

As for preventing people from going abroad, this is also only a rumor. We are not preventing anyone from leaving. But we do not have any currency, and that is no secret. Therefore, we are currently attempting to create all the conditions for getting closer to the convertibility of the ruble, and, on the other hand, to prevent the possibility of speculating with currency at the existing rate of exchange. We want today to remove the limitations, to pen currency auctions where the currency could be freely bought and sold through bank institutions. But for the time being our banks have proven to be unready for these operations. Although everyone admits theoretically that it is necessary to buy and sell currency freely, the banks continue to ask for the preservation of limitations.

We planned to begin holding auctions in 1992. Everything will depend upon the readiness of our banks. It is necessary to provide them with a sufficient amount of currency, and, on the other hand, to prepare them technically. Today 90 percent of the currency exchange occurs in Moscow. It is necessary at first to diversify the process of exchange, and to prepare people, buildings...

[Interviewer] How will the investment policy of the new Cabinet of Ministers change? What will be the role and functions of Gosplan [State Planning Committee] in national-economic planning in general?

[V. Pavlov] In principle, national-economic planning has existed, exists now, and will continue to exist. The

question is in its content. When the producers have complete freedom, is it practical to plan, considering the national economy to be a large plant, or, in general, to construct forecast evaluations or instruments for implementing various strategies?

We proceed from the assumption that Gosplan as such should not exist. Its place will be taken by the Ministry of Economics and Forecasting. Instead of Gosplan, we must have a structure for implementing scientific-technical progress. We have been very slow in turning the economy in that direction. The new agency must engage in forecasting and providing strong points for implementing those achievements that we want to introduce into the national economy.

It is easy to define what those points are. There exist in our country something of the order of 670 projects that we consider to be decisive for developing the national economy. In various spheres of activity. They predetermine the changes in the economy as a whole and decide the fate of the further development of the branch or even the entire region. It is necessary to keep a careful watch on those projects.

This kind of reorganization is also linked with the fact that we would like to create a two-level system of administration. The upper level, irrespective of what we consider it to be—the Union level or the republic level—must engage in strategic questions that exert a decisive effect on the development of the economy. The second level is the economic level. It must be constructed on principles of the economic independence of the enterprises, through their voluntary association and the mutual delegation of functions. That is, we must create at that level, as it were, consolidated associations of free producers that will oppose in the large view the associations of consumers. Interference in the activities of those associations on our part should be carried out only indirectly. It is possible to create favorable conditions for assuring that the necessary production will develop, either by the economic method—through standards—or by ecological requirements to ban their activities.

For the time being, we are thinking of preserving in the form in which it has existed until now only the production of arms.

[Interviewer] How is the privatization process occurring in the country?

[V. Pavlov] According to the Law Governing the Enterprise, collectives today have been given the right independently to leave a ministry or other organizational structure of administration. We carry out the line through rental and redemption for the formation of collective and individual ownership of the means of production, including enterprises. Therefore privatization can occur in various forms. But for the time being, in this area, as in a number of other instances, we have been slow to form a legislative base. This law should have been enacted at least a half-year ago. At the present time, therefore, the process of privatization, to a certain

degree, has been occurring in an uncontrolled manner. There have been many collisions of interests. Very frequently accusations are made that someone is attempting to appropriate for himself property that belongs to the entire nation, by reducing the value of that property during privatization. In certain instances, people are beginning to resort to the uncompensated distribution of property. I think that at this session of the USSR Supreme Soviet all the necessary legislative acts will be enacted. And we probably will ask USSR Supreme Soviet, in connection with the requirements of the public, to enact a special decision concerning the procedure for introducing the Privatization Law. So that those initiatory privatization steps that were carried out can be monitored from the position of that Law only in one part—were there any mercenary reasons why people were so hasty? If there were no mercenary reasons and no one dipped his hand into the nation's pocket, then everything is in order. But if there were such mercenary reasons, please return that property.

[Interviewer] Valentin Sergeyevich, the country's financial mechanism has been operating erratically, a considerable deficit has been formed in the state budget, and there have been disruptions in monetary circulation. Apparently the pricing reform and the wage reform are important, but they are certainly not the only conditions for introducing order. What additional measures does the government plan to take in order to stabilize and improve the country's financial and monetary situation?

[V. Pavlov] This is a very delicate question. The essence is: in what do we see the foundations? If we feel that the commodity-monetary—that is, distributive—relations are the decisive ones, then, consequently, disorder in finance leads to disorder in the economy. But it seems to me that it must be clear to everyone who is attentively following this problem area that simply by taking steps in the area of prices, taxes, and wages, without the reorganization of production and investments, it is impossible to do anything. The disorder in finance was brought about not because the printing presses at Goznak [State Bank Notes, Coins, and Medals Administration] printed a lot of money. The crux of the matter is that for a long time we had a production structure that took in too much without giving back into the sphere of accumulation, including military. That overloading led to a situation in which the earnings were paid to the workers and specialists, but the commodity did not get to the market. That was done for years. We held out for so long only by means of the selling of raw materials. Mother Nature rescued us.

The answer to the question lies in the fact that we must engage in the most serious manner in the rearming of production, in its structural reorganization. Here too much depends upon whether we will be able to get agriculture moving again.

**German Study Sees Inflation as Greatest Soviet Problem**

AU0406114891 Dusseldorf HANDELSBLATT  
in German 31 May 91 p 10

[ADN/"ay" report: "Galloping Inflation Developing Into Biggest Problem of Kremlin Planners"]

[Text] Berlin—In the opinion of the German Institute for World Economic Research (DIW), politically and economically motivated strikes and the conflict between the union and the republics are paralyzing the Soviet economy. Without a union treaty in mutual agreement, efficient crisis management and successful economic reforms appear to be impossible, it is stated in the latest DIW weekly report.

For the first time since the end of World War II, the 1990 statistics showed a retrogressive economic development, which increased considerably in the first three months of 1991. The gross national product decreased by two percent in 1990 and by as much as 10 percent in the first three months of 1991. Almost all branches are effected by the downward tendency, it is stated.

The institute says that inflation is the central economic problem. This became evident in the first three months of 1991 when the consumer price index was 24 percent higher than one year before. The main source of inflation is the state budget deficit, while the financing of a large part of the expenses by central bank credits resulted in a considerable increase of the money supply. The uncontrolled income increases also contributed to inflation. Inflation caused by the unstable financial policy largely destroyed the ruble as a generally recognized means of payment and thus the domestic market. The increase in armament expenses in the 1991 budget cannot be managed, it is stated.

The Soviet prime minister said that the USSR's total foreign liabilities amounted to \$62.5 billion at the end of 1990; compared to 1985, this means that they probably doubled. This year 40 percent of the revenues in convertible currencies expected for 1991 (12 billion clearing rubles; 1985: almost four billion accounting rubles) have to be provided. Therefore, all Soviet exporters are committed to sell 40 percent of their foreign exchange revenues to the state foreign trade bank at the new commercial exchange rate of R1 equals \$0.50.

On an average, 30 percent of the remaining revenues are fed into the enterprises' foreign exchange funds (in 1991 these funds are supposed to amount to five billion accounting rubles), the remaining 30 percent are sold to the republics (share: 90 percent) or the local authorities.

The weekly report regards the central government's zigzag course in the reform policy as harmful. Initiated market economy reforms are again and again dodged by administrative interventions; for example, the KGB's comprehensive powers of control over the enterprises. The unilateral cancellation of a program developed by a

joint expert commission of the union and the Russian Soviet Federated Socialist Republic (Shatalin plan) by Gorbachev in autumn 1990 considerably contributed to the economy's paralyzation, it is stated.

The republics are presently clearly the driving force of the reform policy. The West should take this more into account in its cooperation with the USSR and involve the republics in relief measures. Only concrete projects should be promoted. Unsecured credits are not advisable, it is stated.

In the opinion of the DIW, the Soviet economy urgently needs financial and other support from the West. Apart from the current economic difficulties, the Soviet Union will not only be a large and interesting market for the central and western European industries over the medium and long term, it is stated.

It is more important that without the Soviet Union's participation, pan-European economic cooperation cannot be permanently reorganized after the end of the cold war, it is stated.

**Conversion in Aviation Sector Term 'Absurd'**

91440782A Moscow RABOCHAYA TRIBUNA  
in Russian 25 May 91 p 2

[Article by RABOCHAYA TRIBUNA correspondent Georgiy Dolzhenko: "We Shall Beat Our Swords Into Potato Peelers: Substituting the Economic Levers of Conversion for 'Willful' Directives Is Absurd"]

[Text] Kiev—*We remember the time not so long ago when the conversion had just come into view at the ramparts of our economy, and then entered the captured stronghold on a white horse. We had placed so many hopes on reorientation of "the defense establishment" at that time! The potential of the powerful sector turned to the people's welfare promised us an abundance of television sets, refrigerators, washing and sewing machines, and other commodities to fill up our poor market. Alas, years have passed but the miracle has not taken place.*

It is gloomy and quiet in the museum that is screened off at the Kiev Aviation Production Association imeni 50th Anniversary of the October Revolution, an aircraft plant, to put it simply. The history of the enterprise which observed its 70th anniversary last October slumbers here. Charts show the barracks for the former repair shops and the primitive hangars. This is where the plant began, and where the first cumbersome plywood craft, the K-1, soared up into the sky. Later on, other models came. The Kiev aircraft fought in the skies over Spain and took part in unequal air engagements in the first days of the Great Patriotic War. After Kiev's liberation from the fascists and the plant workers' return from evacuation, they began right away to organize the shipment of "little hawks" to the front. The aircraft builders' service record included helicopters, the An-8 "Flying Whales," and later the "10" and other "children" in the

"An" [Antonov] family. The An-2 and An-24 workhorses—"the cornpickers"—are the ones that are best known. They have been laboring conscientiously for many years now in all parts of the country. They are familiar in other countries as well.

The plant employees worked on the development of other Antonov aircraft modifications at the same time that they were turning out the series aircraft. The appearance of the giant "Antey" had the effect of a bombshell at the Le Bourget World Exhibition. There was no lack of admiring descriptions in the French newspapers: a flying tanker, an air train, a soaring cathedral... Before long, the whole world was seeing a photograph of the Antonov workers' new idol—the "Ruslan," carrying the "Buran" space shuttle on its back. An even bigger giant, the "Mriya," "took wing" after this. This was a record altitude for the enterprise after a long roll and takeoff. Not that this has prevented it from turning out quite a few consumer goods with the scrap—collapsible baby carriages, the "Malvina" washing machines, children's construction sets, dentists' chairs, pressure chambers for medicine, window ledges... The plans were being fulfilled successfully, profit was increasing, and deductions were made for bonus funds and the collective's social development needs as well. There was a large order for transport aircraft in 1989 for a military department. They concluded contracts with many suppliers for equipment, complete assemblies, and instrumentation—but they cost more than half of the aircraft itself, and they had built up stockpiles. Generally speaking, they had spent a vast amount of funds and effort. And suddenly the conversion hit the shops in a shattering volley; as is often the case with us, it was completely unexpected.

Even now the plant workers shudder when they recall that time. The customer canceled the contract and the production line came to a stop. The enterprise was in a very difficult situation. But can our renowned planning committee really forget about someone? They are finding a new job for the plant right here. You probably have been thinking: we have an old, worn-out fleet of aircraft. This is where the Kiev workers should branch out. But do not labor under a delusion and do not look for a game of brains where there is none. Everything has turned out to be much simpler. Which one of our sectors is always lagging? Correct, the rural economy. And they are increasing the plant's civilian production by 80 percent—automatic machinery for packaging meat dumplings and bags of flour, units for freezing potatoes, equipment for dry and wet cleaning of root crops, and even attachments for drying pelts. Everything that was built up over many decades—the technical base, personnel, and the high level of technology—was being summarily dismissed, if you please. It is not by chance that I have spoken about the enterprise's development in such detail. What is aircraft manufacturing? There are hundreds of grades of steel alone, each one with dozens of letter and number designations, and God forbid that even one letter is confused with another. And the precision equipment with micron tolerances? Do we make the

frames for pelts with it? This is like driving nails with a Stradivarius violin, you know.

But there was nowhere to go. Our staffs, including sectorial headquarters, have become proficient in reacting quickly to any campaigns and reporting on fulfillment. And others scratch their heads afterward, as they did when vineyards were cut down during the struggle against drunkenness. In a word, they rearranged the capacities, separated the ground from the heavens, looked for additional spaces, and began riveting root crop cleaners and giving them a fancy edge. The results of the first year of this kind of conversion have led to despondency. Part of the expensive equipment has not been utilized and overhead expenses have increased as a result. While previously, under the system of repeated stock-taking in "the defense establishment," production volumes were not determined by their own expenditures, but by taking past work into account—with complete sets of equipment, instrumentation, and so forth—they have now begun taking only labor and materials into consideration. As a result, the wholesale value of products per hour of manufacture has been reduced to one-sixth as much and production volumes have fallen. And the wage fund has also declined, although labor inputs have remained at the same level. The profit declined by 68 percent last year compared with the preceding year. The economic incentive and social development funds also had to be cut back, naturally. Personnel began leaving en masse. And this is not even a matter of money here. Aircraft manufacturing has always been a prestigious sector, and the people prized their participation in building aircraft. But what is happening now? A good specialist receives much more for the same work in a cooperative. So they are leaving.

Now give some thought to the reason itself. The aviation industry is being systematically broken up before our eyes. Perhaps it has produced so many aircraft for us that there are plenty of them and we need to cut back production and keep one or two plants? Of course not. Recently the "Vremya" program stated that our country was purchasing a consignment of small aircraft from Czechoslovakia, and the announcer reported cheerily that the purchases—including purchases of large aircraft—will be continued. According to late reports, Aeroflot has obtained five A-310 Airbus aircraft from its West European partners. We are slowly being drawn into long-term cooperation with foreign firms, and maintenance and spare parts will be required. And this is with foreign currency. But at this same time, our Ministry of the Aviation Industry is changing over its production to pelt frames and other products of the former Minlegpishchemash [Ministry of Machine Building for Light and Food Industry and Household Appliances]; it has been charged in a willful manner with the manufacture of 14 complexes of industrial equipment for light industry and seven for the agricultural industry. They told me bitterly at the plant: we do not understand this policy of the state with respect to "the military establishment." The enterprise should be shifted to peaceful production which is in

accordance with its specialization and where we have become skilled professionals. Compared with what we are turning out now, we can buy dozens of units of machinery more for the agroindustrial complex in other countries with one of our An-32's.

And if only the Kiev workers turned out to be in this situation. The OKB [Experimental Design Bureau] imeni Kamov, the leader in helicopter manufacturing, and its experimental plant have been instructed to turn out cabbage transplanting combines and equipment to package dried fruits; what is more, the "Znamya Truda" Aircraft Plant, which manufactures the famous "MiG" aircraft, was compelled to agree to the agroindustrial complex proposal to manufacture equipment because of the reduction of its order and uncertainty about the workload of its production areas. Do you remember the unique aerobatics by Rimas Stankavichus and Sergey Tresvyatskiy in the Su-27 fighters, whose performance is superior to the vaunted American F-15 and F-117A, at the air show in Seattle? Our television has shown excerpts of the holiday. So the OKB imeni Sukhoy and the country's Gosplan and Sovmin [Council of Ministers] are "weighing" whether to develop packaging machinery for bulk products. I assure you that this list may be continued. Last fall the brain trust of the Ministry of the Aviation Industry—the NII and NPO [scientific research institutes and scientific production associations]—displayed the latest technologies for manufacturing consumer goods at an exhibition in (Setuni). Fine products—glass nails, superstrong windshields for vehicles... But it is common knowledge that initiative is punishable for us: your sector has thought it up, so you apply it. To the detriment of your main occupation, naturally.

By becoming more extensive and intensive, the conversion pushed its way through the "mail boxes" and other sectors of the military-industrial complex. Let us take shipbuilding. The Leningrad Admiralty Association has had to turn out equipment for elevators and the flour milling industry. The Kiev "Leninskaya Kuznitsa" Plant has begun making tables for cutting fish, trash incinerators, and God knows what else instead of building combat vessels. And at the same time, the country is concluding agreements to build new tankers, dry cargo vessels and passenger liners in foreign shipyards. I heard almost exactly the same thing at the "Leninskaya Kuznitsa" Plant as at the aircraft plant: give us the opportunity to go into the world market with our ships and we will fill up the country with equipment for light industry and consumer goods purchased with the foreign exchange earned. A cry of despair can be heard in the newspaper stories nearly every day about the consequences of such a conversion and the pain for the country's future. And what of it? Exactly nothing. Drafts of laws "On defense," "On the state defense enterprise," and "On the conversion of military production" are still on paper. There is no conversion program, either. In the meantime, the plunder is continuing. And under the appealing Jesuitic slogan "We shall beat our swords into

plowshares." Whoever is opposed to raising the workers' standard of living at the cost of "the defense establishment" is a reactionary, a conservative, a "hawk," or a suspicious bird in general.

Let us look at how the conversion is proceeding with our neighbors in China. They have the same problems there that we do: a diverse and inefficient economy, a large army, and territories that have been developed unevenly. Their reorientation was begun at about the same time as ours, but there is already progress there. In particular, the defense sectors have been stabilized and the manpower drain has been averted. How did they do this? In the same way that we have already mentioned: by through study of the market and careful consideration in selecting products, with as much specialization as possible. The shoemaker continues to stitch his boots and the baker continues to bake his pies. But not the other way around, as it is here now at times. Moreover, the state and local authorities are providing them with credits, but the military-industrial complex is working them off.

We also should take the intensified division of labor in the world market into account. It would be logical to enter the market with the very best that we have—the same oceangoing and river vessels, aircraft, rocket and space technology [raketno-kosmicheskaya tekhnika], gigantic presses and equipment for power stations. This is within the capability of a great power. And we can buy the potato peelers in cooperatives. And this is what is being done in spite of directions from those silent planners and bureaucrats. The commercial cost accounting firm "Ruslan" has been established under the Kiev OKB imeni Antonov, and our AN-124 work-horses are being willingly chartered by foreign firms to ship cargoes over long distances. A protocol of intentions was signed recently with the British Aerospace Corporation to launch the seven-ton "Khotol" pilotless spacecraft from the "Mriya." And it appears that we are proceeding correctly by not selling these unique aircraft ourselves. The day is not far off when the Kiev aircraft builders will "give wing" to the new Tu-334 passenger aircraft. In my view, this is an excellent answer when we are asked where the conversion should be taxied.

#### **Partnership Is Base for Udmurtia Conversion Program**

*PM1405151391 Moscow Central Television First Program Network in Russian 1800 GMT 11 May 91*

[From the "Vremya" newscast: Report by F. Simakov, O. Chirkov, identified by caption, from Sarapul, Udmurtia]

[Text] [Announcer] One of the most complex and painful programs in the restructuring of our economy is the conversion of the military industry.

On the one hand it has gotten off the ground, as it were. By March of this year more than 500 military-industrial complex enterprises had begun to switch to the production of civilian goods.

On the other hand, however, this process has not yet assumed a systematic, organized character. The question of the strategy of conversion is still hanging in the air, as IZVESTIYA described it. Udmurtia, where the country's first regional conversion program has been drawn up, is setting an example of a coordinated, well thought-out approach to conversion.

[Simakov] Let me remind you how three months ago we showed you this plant building which had been mothballed. This was done by no means in accordance with the wishes of its proprietor, the collective of the Sarapul electric generator association. Today construction workers are at work here.

[Ye.P. Storonkin, association director general, identified by caption] I believe that by the end of next year this building will be completed and we will be able to produce many millions of rubles' worth of additional consumer goods. The production of our "Universal" appliance, which is currently in short supply, will increase by approximately 30 million rubles' worth, no less.

We now have contracts for delivery of a complex of machine tools which will make it possible to considerably reduce the production costs of our output and subsequently, naturally, also the prices for our appliances.

[Simakov] What the plant's workers need are this type of automated production lines capable of machining not just one component, as here, but a whole range of components for the "Universal"—a highly popular range of power-driven household appliances.

This is not the only problem which the Udmurt defense industry workers have. They have a whole bunch of them, the main one being how to survive, how to avoid bankruptcy. One of the many solutions which the regional conversion program proposes is partnership—production-sharing relations within the republic between enterprises which fall under the jurisdiction of different departments. The same Sarapul plant is already collaborating with Izhevsk motorcycle builders, gunsmiths, and other colleagues who, incidentally, are able to assist the electric generator builders in one way or another in the production of civilian output and consumer goods.

At a republic conference which brought together the "top brass" of Udmurtia's defense complex a pointed discussion took place, not about theory but about the current practical experience of conversion and its prospects.

## INVESTMENT, PRICES, BUDGET, FINANCE

### Decrease in Budget Deficit Unlikely

914.108004 Moscow EKONOMIKA I ZHIZN  
in Russian No 16, Apr 91 p 5

[Article by V. Panskov, candidate of economic sciences, under rubric: "Pertinent Topic": "The Battle of the Budget: There Won't Be Any Victors"]

[Text] Analysis shows that one of the most important causes of the inflationary processes that are occurring in our country and that are leading to the increase in the shortage both of consumer goods and of commodities intended for technical and production purposes is the catastrophic situation with regard to state finance. Therefore it is not accidental that, both in the Basic Trends for the Stabilization of the National Economy and the Transition to the Market Economy which were approved by USSR Supreme Soviet, and in the previously considered programs for transition to the market (including the "500 Days" program), the task that was posed as an urgent, first-priority one was the task of sharply reducing the budgetary deficit, to the maximum extent possible.

Most scientists and practical experts proceed from the assumption that it is sufficient to reduce the size of the budgetary deficit to 30-40 billion rubles, that is, to a level that does not exceed 2.5-3 percent of the gross national product. Yes, in the economically developed countries a budgetary deficit within those limits does not contribute to inflation. It would seem, however, that in this instance it is scarcely desirable to rely on the Western practice. The economy of the West can allow itself the existence of an annual budgetary deficit within the assigned limits, inasmuch as that budget rests upon a saturated consumer and commodity market. But we are forced to reorganize the economic mechanism and the management conditions while we have a very severe shortage both of commodities intended for technical-production use and of consumer goods. Therefore, if we want to enter the market with the smallest losses for the nation, we need a completely balanced budget.

The measures to achieve financial stability which were taken in the USSR Law entitled: "The 1991 Union Budget" and in other decisions of the legislative and executive authority of the Union and the republics must promote the reduction of the budgetary deficit for the country as a whole, as evolves from the approved union budget and the budgets of a number of union republics, to a level of 40-50 billion rubles. Thus, the situation with regard to finance that one can discern may not be ideal, but at least one can see obvious progress. If we recall that in 1989 the budgetary deficit exceeded 80 billion rubles and that we ended last year with a financial disbalance of more than 60 billion rubles, then today's figures are close

to that indicator that opens up broad scope for the accelerated shifting of the economy to market conditions.

#### Unpopular Sources of Income

At the same time, even a superficial analysis of the sources used to equalize the financial tilt indicates that the situation with finance is not yet improving as rapidly as it seems today, and it is premature to speak of any financial stabilization. And that is natural, inasmuch as, all other conditions being equal, it is impossible for the budgetary income to increase when there is a decrease in the volumes of production and a reduction of its effectiveness. In order to balance the budget in this instance it is inevitable to increase the extent of the taxes and duties levied on the commodity producers and the population, and also to take such unpopular steps as increasing the retail prices of commodities and services by the directive method or by introducing so-called contractual or commercial prices. Under the present-day conditions of the development of our economy that is limping on both legs and the existing structure of the state budget's expenses and income, these extremely unpopular measures are inevitable if we actually want to stabilize the country's financial situation and to make the transition to the market. These measures that are inevitable today exist both in the approved union budget and the budgets of the union republics, and in a number of decisions enacted by the USSR Supreme Soviet and the country's government. The improvement of the financial balance is ensured to an insignificant degree at the expense of a reduction of budgetary expenses. The expenses for military needs, capital investments, and other expenditures from the budget are reduced by approximately 20 billion rubles. That is the limit that today is admissible with the budgetary structure that has developed, when the overwhelming part of its expenses is linked with the social-cultural sphere and the maintenance of the public's standard of living. The remaining resources are derived from the funds of the enterprises and the population, both in a mandatory procedure (sales tax, price increase, withdrawal of depreciation, etc.), and on a voluntary basis through the use of part of the funds received from the privatization of state property.

However, the accelerated transition to the market, it would seem, is becoming an end in itself for the agencies of authority at all levels of administration. And for its sake the uppermost agencies both of the legislative and the executive authority, willingly or not, have begun retreating from their own principles.

Moreover, the accelerated transition to the market, practically speaking, has begun. As everyone knows, effective 2 April the retail prices of a considerable number of mass-demand consumer products will no longer be under governmental control. And there would not be anything fearful in this if there were not a certain circumstance: unfortunately, everything in finance looks more or less attractive only on paper. In real life,

however, the budgetary deficit, even on the basis of the most modest computations, exceeds as a minimum 110 billion rubles. That is attested to by the following data from an analysis that was carried out

#### Disappearing Sales Tax

The income in the state budget approved for 1991 stipulates proceeds from the sales tax in the amount of 36 billion rubles, or approximately 30 percent of the total amount of that tax. The remaining 70 percent, as everyone knows, is supposed to go into the budgets of the union republics. Thus, the total amount of the sales tax is planned in the amount of, as a minimum, 100 billion rubles. Approximately 70 billion rubles will be taken from that amount to cover the budgetary deficit, that is, much as approximately 30 billion rubles of that tax will be used to compensate the budgetary organizations for the expenditures increase caused by the increase in the cost of the commodities purchased them from the sales tax, and also to compensate the losses of taxes from the enterprises as a reduction of their profit, inasmuch as, in the budgetary settlements, it is stipulated that the payers of the sales tax will include their increased expenditures in the cost of the output being produced by them.

The last-mentioned circumstance, in addition to the fact that, at every stage of buying and selling (regardless of whether it is retail trade or wholesale) the sales tax should have been paid, without an offset for the previously paid tax for the delivered raw materials semi-finished goods, components, etc., is one of the factors for the tremendous size of that tax that has been stipulated in the budgetary income.

After the confirmation of the union budget and the budgets of many union republics and local soviets of people's deputies, the government confirmed the Statute Governing the Sales Tax, in conformity with which provision is made for the offsetting of the previously paid tax, and what has remained practically the sole payer of that tax is the population and the budget itself as the source of financing of the final consumer. There has been a corresponding refinement of the amounts in that tax that can become the budget's income during the current year.

Simple computations indicate that the proceeds from the sales tax are reduced by a minimum of 30-35 billion rubles, and, naturally, the budgetary deficit increases by the same amount. In addition, because of the delay in the enactment of the Statute governing this tax and the instructional guides pertaining to it, the collection of the tax did not begin everywhere on 1 January, but at best in February of this year. As a result, the tax proceeds are still less than those stated in the budget income by an additional 10-12 percent, and this is yet another 4.8 billion rubles added onto the announced budgetary deficit.

To this it is necessary to add not just a single billion in losses to the budget from the benefits that were granted with regard to this tax by the union republics and the

local soviets of people's deputies. In March 1991 the RSFSR Council of Ministers, for example, confirmed the additional list of commodities and services that are not subject to this tax, and simultaneously granted to the republics that are part of the RSFSR and to the executive committees of local soviets the right to introduce additional benefits and to repeal the taxes on individual commodities. Suffice it to state that during January and February the proceeds to the budget from that income source constituted a total of one billion rubles, as compared with 10-11 billion rubles according to settlements with the budget.

#### What Will Privatization Provide?

The fund for the stabilization of the economy also will not be formed in the planned volume. As everyone knows, it is planned to transfer to that fund 20 percent of the proceeds from the privatization of property, using for those purposes the uncommitted balances of the funds for the economic encouragement of enterprises, as well as the profit from the current year and the public's uncommitted funds.

The fund for the stabilization of the economy is intended to finance a number of expenditures that were previously financed from the budget, particularly capital investments; subsidies to enterprises operating at a loss; and expenses for conversion. Therefore the introduced additional payments and deductions from the enterprises and the population for payment into that fund, by not going directly into the budget, are also, in essence, being channeled into the reducing of the budgetary deficit. According to computations, it is planned to obtain in 1991 from the privatization of state property 300 billion rubles, and correspondingly to use for purposes of financial stabilization—but, practically speaking, into the budget—60 billion rubles. Is that realistic?

Let us assume that the enterprises will use for those purposes the maximum possible balances of the funds for economic encouragement. That can be approximately half the balances of their funds as of the beginning of the current year, or approximately 60 billion rubles. This is theoretically possible, but, practically speaking, one would scarcely think that it can be fulfilled.

Even in that instance the population must lay out on a voluntary basis, during the course of one year, a minimum of 240 billion rubles. How realistic is this, if the total amount of contributions today constitutes 400 billion rubles, and more than half the contributions (56 percent) are of a size less than a thousand rubles? But if that occurs, then for next year there will not be any funds from privatization, but the budgetary expenses will remain. Once again, there will be sharp increase in the deficit, with all its concomitant consequences under the conditions of the development of market relations.

It would seem that the most realistic thing would be to receive from privatization during the current year no more than 50-100 billion rubles, which will make it

possible to channel into the fund for stabilization of the economy, and, consequently, into the covering of the financial disbalance, 10-20 billion rubles. Consequently, no matter how you twist and turn, once again it is possible that 40-50 billion rubles may not be paid into the treasury.

#### Growing Deficit

Moreover, the budgetary policy being carried out by individual union republics, and primarily the Russian Federation, leads willy-nilly to a sharp increase in the budgetary deficit for the country as a whole. As everyone knows, the economic departments of a number of republics have enacted (despite not only the union legislation, but also their own) decisions concerning the inclusion of all the income derived on the appropriate territory only in the budgets of the union republics. That means, factually speaking, the blocking of the union budget, which, during the current year, is supposed to finance approximately 50 percent of all the budgetary expenses throughout the country. As a result of these actions, there was a reduction by three-fourths in the proceeds paid into the union budget from the taxes on profit. Deductions paid into the union budget from the sales tax, which tax has already been reduced as compared with the computed indicators, constituted a total of eight percent, as compared with the 30 percent stipulated by the law. As a result of this there has been an inordinate increase in the expenses of the budgets in the union republics. For example, under conditions of the economic slump, the proceeds paid into the budgets of the union republics from the tax on profit have practically doubled.

The jurisdictional intention of the decisions made by the economic departments in those republics is completely clear, no matter what attempts are made to conceal it—to guarantee, factually at the expense of other people's funds, namely the funds in the union budget, the financing of populist laws without taking into consideration the economic state of the country or the resulting law of money.

If the republics do not return to the union budget the financial resources that are payable to it, the deficit in the union budget will increase by the amount that has not been received, and that deficit will be covered at the expense of an increase in the state debt. But if the money is indeed returned, the deficit in the republic budgets will increase, inasmuch as the additional expenses in those republics began to be carried out and it is already impossible to stop the financing of them.

The economic result from this, in either case, will be the same—the overall increase in the budgetary deficit throughout the country, an increase in currency emission, the escalation of inflation, etc.

#### A Price Increase Will Not Save the Situation

Of course, it is possible under these conditions to cover the gaps in the budget by taking retail prices out from

under state control, which, incidentally, is already being done by many agencies of authority both in the center and in the outlying areas. In particular, in the budgetary settlements for the current year it has already been planned to cover at the expense of an increase in retail prices a budgetary deficit of several tens of billions of rubles. But that source will exist for only a short period of time, and then there will inevitably arise the questions of the living wage, the raising of wages, pensions, scholarships, etc., and, consequently, the increase in expenses and, consequently, the budgetary deficit. Everything will have to be begun all over again.

Only one-third of the additional income from the price rise will be paid into the budget; the rest of the funds will remain at the enterprises. But for the enterprises the benefit here is also only ostensible. The price increase is only an additional impetus to inflation, which leads to the increasingly acute shortage of commodities and thus to the impossibility of creating a market. Consequently, once again, there will be barter, the devaluation of money, etc., etc. In addition, the enterprises will encounter the same problem that the state does—the problem of the need to increase the wages paid to their workers because of the unrestrained increase in prices.

The implementation of the measures planned for the current year to achieve financial stabilization has been considerably complicated by the unending "war of laws and budgets."

The supremacy of the republic laws over the union laws, which has been proclaimed in a number of republics, is leading to the instability of the entire financial system and to the impossibility of creating an overall economic space that operates according to uniform laws. We must have first of all a tax system that is uniform for the entire territory of the country, a system with clearly defined rights for the center and the republics for establishing the types and rates of taxes and the benefits pertaining to them.

It is necessary for all of us finally to understand that the country's finance and budget can be pulled down (and the existence of such a tremendous budgetary deficit and the complete devaluation of the ruble confirms the profound financial crisis) just by one's own efforts.

The correction of the situation, however, can be achieved only in unison, by carrying out a uniform financial policy, but simultaneously granting actual sovereignty to each soviet of people's deputies in forming and using its own budget. Every soviet of people's deputies, unconditionally, must independently construct its budget on the basis of the planned income, and must define the trends and the extent of expenditure of budgetary funds.

The precise delimitation of the income among the links of the budgetary system, the legislatively established system that defines which income will be paid, in what amounts, into the union budget, into the republic budgets, and into the local budgets, are a guarantee and

indispensable condition for the unity of the budgetary system in a situation with the simultaneous sovereignty of each budget.

In the recently published draft of the Treaty Concerning the Union of Sovereign Republics, provision has been made, to a definite degree, for the distribution of the functions in the area of income between the republics and the center. But in the resolution of tax questions that is proposed by the draft there is a serious contradiction. In particular, Article 5 stipulates that the USSR, jointly with the republics, carries out the powers to carry out a uniform tax policy. And that, it would seem, is correct. Simultaneously with that, proceeding from Article 8, the republics independently establish taxes and duties.

Discrepancies such as this aggravate even more the contradictions between the republics and the center, and willy-nilly lead to the continuation of the "war of laws and budgets."

The granting to each republic of the right to establish its own tax system leads to anarchy. Even today, under the conditions of the existing economic agreement, neither the enterprises nor the taxpayers know the rates at which they are to pay the taxes, under what conditions, and to what budget. Under these circumstances not a single law in the field of economics, however good it may be, will be able to work to develop the economy. Who, then, will think seriously about investing funds for the development and expansion of production, if he does not know ahead of time what taxes he must pay, and in what amount, and if he does not simultaneously have a guarantee that tomorrow any authority (rayon, oblast, republic, or union) will not introduce new types of taxes or will not increase their rates in unpredictable amounts?

Within the confines of the uniform economic space, the Law Governing Taxes must be uniform, but simultaneously, within the limits defined by that law, must give the initiative to the outlying areas.

## INDUSTRIAL DEVELOPMENT, PERFORMANCE

### Financing Problems at Magnitogorsk Metallurgical Plant

914A0810A Moscow *IZVESTIYA* in Russian  
31 May 91 Union Edition p 2

[Article by A. Yudin, free-lance correspondent: "Flagship on Its Knees"]

[Text] A complex economic situation has forced the flagship of our country's metallurgy—Magnitogorsk—which accounts for one-tenth of the Soviet Union's metal production—into a financial pit.

When perestroika began here, people boldly proceeded to begin a fundamental modernization of the steel-smelting and rolling production facilities. Not being chary with their epithets, the leading officials of the city

and oblast dubbed this construction project the second birth of Magnitka. The first stage alone of this modernization promised an annual added volume of commercial production amounting to 400 million rubles. It was planned to put into operation as early as 1989 the first phase of the converter shop with a capacity of five million tons of steel and the "2000" strip mill for hot rolling with an annual production of four million tons. In order to do this, they were confronted with the task of assimilating more than a billion rubles of capital investments.

However, under the altered conditions, this grandiose intention was doomed to defeat. This year they barely managed to put into operation just a portion of the converter shop's equipment; it is capable of providing only one-fourth the planned capacity of its first phase. And even this had to be brought to a halt during the miners' strikes. And now it is difficult to say at all when the new strip mill will be put into operation, although it has been "swelled" by almost a billion rubles.

Approximately a like amount of funds is required in order to complete construction on these facilities. But they also need to construct a cold-rolling mill, without which the technological "chain" would be incomplete, and the economic gain from modernization would be greatly decreased. This means adding almost another two billion rubles for the new shops! And just where are they to get such a large amount of money?

They no longer can place their hopes, as they did before, on the centralized sources of financing. This year the combine had planned on having slightly less than 600

million rubles of its own funds to spend—for the most part—on the construction of production facilities. But, whereas last year it obtained profits of approximately 800 million rubles, during the present year—because of the price hikes on electric power, transportation, and miscellaneous service, while the metal prices remained stable, it is calculated that its profits will "shrink" by more than half.

During the first quarter this combine managed to scrape up only 107 million rubles for the modernization; this amount came from its own funds and from short-term credits. As a result, there was an increase in the amount of unfinished work, the overall volume of which is now higher than the total capital investments planned by the enterprise for the current year. Because of the unreliable financing and the vague prospects for the future, the builders of the Polish firm "Centrozal" intend to reduce the number of their own employees, though they acknowledge that this is an undesirable variant for them.

It is perfectly clear that the combine will not make it through the extremely expensive modernization on by its own efforts and forces. In order to strengthen it, the combine's leaders have been knocking themselves out in efforts to find solid creditors who would help them to speed up the pace of modernization and relieve the burden of growing payments for credits. Otherwise, the ruinously long construction project will not only immobilize the enormous amounts of capital invested in it, but also bury for a long time the hopes for improving the situation in the neglected social sphere of that city of half-million people which essentially remains a huge workers' settlement attached to the metallurgical giant—the "first-born of the Stalinist five-year plans."

## AGRO-ECONOMICS, POLICY, ORGANIZATION

### Excesses in Rush to Private Farming Lamented

#### Value of Kolkhoz Stressed

914B0167A Moscow SELSKAYA ZHIZN in Russian  
23 Mar 91 p 2

[Article by M. Sharov: "Why Break Chairs..."]

[Text] It appears that we are all suffering from farmerization.

It appears that we, one and all, have come to believe not only in any kind of devilry, but also in apparitions.

It appears that we have all torn ourselves away from the sinful world and, having thrown off all ambition and passion, have found our way into the heavens.

It appears that it is not today or tomorrow that we, being moved by the same impulses, depict boldly on banners: "Everything for the farmer, everything in the name of the farmer!"

It would appear that we have thoroughly integrated the kolkhoz, but when we hear the word "farmer" we begin to salivate, and the yearning stomach anticipates the eternal pleasure of this occupation. Thus a magazine with the corresponding name is already available. Festivals with the desired name are being held. Both day and night on all television channels, on television screens and on newspaper pages the foreign and modern sounds different: "farmer," "by the farmer," and "for the farmer"...

The position that is taken on this question is like the password to the heart of "socialite" village experts, like litmus paper that is used to check the attitude towards you by those around you. If you say you are against farming, bosom buddies will walk a mile to avoid you and your own dear wife will refuse to serve you soup. In order not to die of hunger or to lose my last remaining friends, I am admitting my inexhaustible and unlimited love for the farmer.

But...But a well-known dictum comes to mind: "Of course Alexander of Macedonia is a hero, but why break the chairs?" Its essence today is in the fact that beyond the lone farmer trees we do not want to see the large forest of our national economy. If we believe the latest figures, as revealed recently by the Russian premier in his television interview, in the largest republic there are about 6,000 farmers' enterprises and about 10,000 people who wish to become involved in farming and livestock. Throughout the country there are about 40,000 farmers—daredevils and pioneers before whom we must respectfully remove our hats, since these people are brave and diligent and capable of revitalizing the real manager of the soil. But why break chairs and thrash the

kolkhoz while the farmer's chicken is still roosting and while we do not know when it will lay the desired egg.

Let us take pencil and paper in hand and make the simplest arithmetic calculations. While doing this let us consider that the absolute majority of farmers will work not the best land by far, and that the main instrument of labor will be not the foreign technologies and machines but at best the written-off Belarus and the deteriorated livestock yard. Will they produce a large amount? I think not. It will not be enough to make up for the production deficit. Under the best circumstances they will provide one meal for Moscow and Moscow Oblast. Thus this and next year and in the near future the farmer will not become the country's breadbasket. After all, no matter how one looks at it, right now farmers comprise approximately 0.3-0.4 percent of the total number of village workers. Not to see this or to consider it means believing blindly in miracles and in apparitions.

No matter how reluctant one is to admit it, the collective enterprise will continue to be the country's breadbasket. It is another question what it will be like—whether an association of peasant enterprises or a cooperative union. However, if anything happens today to a working enterprise, whether bad or poor, we will kick ourselves. And no illegal packages will help us.

Meanwhile, in the village the atmosphere is like that of a train station. Judging by everything, kolkhozes and sovkhozes are slowly beginning to pack their suitcases in order to move in all four directions. It is true that the tickets have not been bought yet, but it looks like the cashiers have already prepared them and intend to sell them.

Having been sucked into a Samoyed rage, we have poured so much rubbish on the heads of kolkhozes and sovkhozes that both the chairman and the specialist as well as the rank-and-file tractor operator in the village today feels very uncomfortable. And then we have the widely-proclaimed declarations on the priority development of the agricultural sector. Nothing is a priority if the city has completely turned away from the village and the monopolists of domestic industry are simply twisting the arm of enterprises by increasing prices for equipment, building materials, fertilizer, transportation and other services by a factor of 4-7 in some cases! This kind of "priority" resulted in the fact that the price deficit, even under conditions of plan profits, equals 21 billion rubles in the kolkhozes and sovkhozes of Russia alone! It is quite evident that with such dictates even strong enterprises will not exist for long. Should it surprise anyone that, seeing this kind of government attitude towards the village, directors and senior specialists are leaving for unrestricted farmers' grain, thereby exacerbating even more the situation that can result in complete production disorganization.

Perhaps not all of us will break chairs, but we may think seriously about how to help the village to improve and to take a deep breath. In Mariupol a city council session

proclaimed this year the year of the village and decided to allocate a portion of the profits of industrial enterprises for the building of farms, shops, roads and housing. Perhaps we will follow the good example of the deputies of the Donetsk Azov region and turn our faces to the village, as Premier V. S. Pavlov recently said. This must be done not within one grain-producing region, but within the entire country, because all of us are not only residents of the country but consumers of food as well.

**Follow-Up: Farmer Only One Part of System**

914B0167B Moscow SELSKAYA ZHIZN in Russian  
18 May 91 p 1

[Letter to the editor by N. Petrenko, settlement of Pionernyy, Tomsk Oblast: "Why Break Chairs..." (23 March)]

[Text] Kolkhoz or sovkhoz—after all, it is not only grain, vegetables, milk and meat which contemporary slanderers are putting so much pressure on today in blackening kolkhozes and sovkhozes. The kolkhoz means the village hospital, the nursery school, consumer services, sports competition, the club, the library, the bakery, the building of housing, sociocultural services and roads. It means much more. The farmer is only the producer of agricultural products. To destroy kolkhozes means to destroy villages and towns.

**Moscow Area Farms Contracting Harvest Workers in Advance**

PM2205085791 Moscow Central Television First Program Network in Russian 1800 GMT 18 May 91

[From the "Vremya" newscast: Report by V. Golubev and Yu. Prokofyev, identified by caption]

[Text] [Announcer] Transport, particularly air transport, and fundamental sectors are all very important. Nowhere are they more important than in agriculture. Each one of us knows that the situation there is the limit, so to speak. Will we save this year's harvest? The report that you will now see contains a hopeful note, of course, but also a quite incomprehensible optimistic note.

[Golubev] The Oka flood plain: thousands of hectares created by nature itself for vegetable and potato farming. Look how cabbage planting has suffered, with equipment dating back 20 years. Yet we shot this report at one of the leading specialized farms in the Moscow area—the Yemelyanovka Sovkhoz [State Farm]. Things are quite different in the potato field. A Dutch planter is at work. In a day two guys can plant 12 hectares with potato seed. Technology plus skill. The sovkhoz copes on its own with the planting and sowing of the spring crops, without reducing the area under crop. Then there's the harvest.

There are roughly 2,000 hectares of vegetables and potatoes. They cannot harvest them themselves. Dutch potato harvesting technology does not require people either, but at present there is only the promise of a

foreign combine. That's the situation, if not worse, at most similar farms around Moscow. Do Muscovites really have to grub around in their native soil to earn hard currency when Polish and German potatoes are certainly no better?

[N.N. Kirillov, sovkhoz director, identified by caption] Last year taught us to work. The city left the sovkhoz workers to face the harvest. We are now doing a great deal of work with the townspeople. We have concluded contracts this year. A few people have begun to show an inclination for agriculture. They realize that they have to help agriculture.

[Golubev] Common sense seems to have won through; hunger will make you do anything. It's better in the future to buy equipment with hard currency rather than dubious foodstuffs. A dozen Dutch complexes alone would stop thousands of Muscovites from having to travel around for potatoes.

**Reader's Letter Calls for Creation of Peasant Bank**

914B01804 Moscow SELSKAYA ZHIZN in Russian  
4 Jun 91 p 1

[Article by A. Chureyev, Ust-Kamenogorsk, East Kazakhstan Oblast: "Certainly, A Bank Is More Important"]

[Text] What does a peasant need at the present time? Particularly those who wish to work independently. Many are of the opinion that the peasant party should protect the countryside. It is under this flag that all types of unions are being created and farmer congresses are being conducted at the oblast and republic levels. And yet it is my opinion that other factors are required—freedom and resources. First of all, an urgent need exists for creating a peasant bank—at the republic level, with branches of such a bank in the oblasts and rayons.

What is my view of a peasant bank? In such a financial institution, a farmer can, in the absence of unnecessary red tape, place his resources or, conversely, obtain the required amount. In addition to monetary operations, a rural entrepreneur could obtain needed information here, where and how best to sell his products, acquire the needed machines and equipment, conclude agreements for construction work, consult with specialists and so forth.

Thus I view the peasant bank as a type of staff of knowledgeable individuals who are vitally interested in solving the special economic problems of the rural areas. The bank's staff must be minimal in size and consist of highly skilled individuals. If there is to be such a bank, then we will need a peasant party, unions and associations with their large staffs of officials.

## REGIONAL DEVELOPMENT

### **Belorussia, Moldova Address Land Ownership Questions**

**Belorussian Academician on Peasant Farming**  
*914B0159A Minsk BELORUSSKAYA NIVA in Russian*  
*28 Mar 91 p 2*

[Article by G. Lych, Director of the Economics Institute, BSSR AS [Academy of Sciences] and Academician at the BSSR AS: "To Decide for Ourselves!"]

[Text] Recently, the question of private land ownership has not left the pages of our newspaper. There is practically no end in sight to passionate disputes on this subject among the people's deputies of the most diverse levels. This kind of enormous interest in the question of land ownership is not accidental. It is no secret to anyone—whoever has the right to land ownership holds the power. This is why we felt it was proper to have a national referendum on the question of private ownership of land. But here it is also very important that the voices of the workers of fields and farms be heard and that they not be drowned out by the more numerous multitudes of city residents. If this happens, if society again ignores the opinions and interests of village residents, there will be an even further delay in finding a solution to our agricultural problems.

In our opinion, in order to avoid this kind of undesirable development of events, the referendum should be carried out separately among the village and city populations. Moreover, the decision concerning the recognition and introduction of private land ownership must be considered to be passed only under the condition that not only the majority of the population but also of the village population separately demonstrates support for it.

It is no less important to make the selection totally conscious. We must not allow the euphoria of emotion to reign over good sense, as has happened in the past. We will have to pay too high a price to our longsuffering people, and first and foremost to our peasants, for our mistakes if this is tolerated in solving the fateful land question.

In connection with this, I would like to express some of my own ideas on this matter. A solution to the problem of land ownership must be found within the channel of all social activities related to the implementation of the indicated strategies and tactical goals and tasks; these should be not only socio-economic, but political as well. This can be explained by the fact that property relations are at the basis of all production relations, and the latter form the economic base of society, predetermining its political structure and the nature of essentially all forms of public activity.

It follows from this that if we truly have begun to follow the path of democratic development, and if the principle

of total power of the people proclaimed by us was not for the sake of attractive speech or an attractive slogan but a call to action, then the land must remain the property of the people as an exceptional, irreplaceable and limited resource. The transfer of land to individual citizens as private property with the complete right of management, use and disposal will mean nothing but the deprivation of the people in general of a portion of their very considerable power.

Of course it would not be correct, based on this report, to imagine that the people as a whole and every individual separately must participate directly in realizing the rights of land ownership, use and distribution. However, in any case society as a whole must retain for itself a certain portion of authority that is essential and sufficient to effectively control the activities of its members and groups, directing them toward common national interests.

The same is true for the given specific instance. Having placed on agricultural workers the responsibility of finding a solution to the entire complex of problems related to production output of farm and livestock products, society on the one hand must provide them with the authority that is needed to carry this out, including as regards land. Moreover, the peasant must be made to feel that he has complete authority on the land. On the other hand, society must retain for itself enough authority to be able to at any moment prevent any possibility of harm due to inefficient land management and to be able to guarantee that general national interests related to the use of land resources will be furthered.

As for losses, they can be manifested not only in a decrease in soil fertility and in the deterioration of other qualitative features of the soil, which attention is usually focused on. Society can suffer definite economic and social harm by land speculation as well. Incidentally, negative socio-economic consequences of land speculation are not as harmless as some try to imply at times. Land speculation may not be limited to the fact that a sly commercial operator buys and then sells a piece of land at a great profit to himself. However, such transactions are very costly to society. After all, in the final analysis no one but society, and more precisely consumers of agricultural products, will have to settle accounts with sly operators. The fact is that every new landowner usually strives to fully and as rapidly as possible recoup his outlays for the land purchase by means of prices for products he produced on his new land. From here it follows that there will be a steadfast increase in prices for agricultural products according to how much speculators inflate land prices.

Of still greater danger for society will be the corruption of individual administrative workers related to the control and state regulation of decrees regarding the sale and purchase of land parcels. Successful businessmen (with the development of the market economy they will undoubtedly appear here as well) will try to invest their

temporarily-free capital in land acquisition at the slightest opportunity. They will do anything to achieve this goal.

Of course we can assume that with the introduction of private land ownership society will still be able to weed out the operators from the underground economy to prevent their participation in the acquisition of land for private ownership and that only honest workers will become its purchasers. But even in this case we will face considerable additional difficulties on the path to highly effective agriculture.

In order to prevent, or at least to considerably limit possible land speculation, its initial sale into private hands must be implemented according to a price that is as close as possible to its real cost. As a result the purchase of a land parcel for the effective management of commercial farming and livestock raising will require considerable sums of money. In the prevailing number of instances money will not be available, and nothing will be left to future farmers but to go to the bank for credit. But in addition to the purchase of land, farmers will need considerable resources for the building and repair of production and non-production structures and facilities and for the acquisition of machines and equipment and many other resources and work implements.

In summary, the purchase of land will considerably exacerbate the already very difficult financial situation of beginning farmers. This can have at least two undesirable consequences. The first is the impetuous increase in prices for agricultural products, encouraged not only by the desire for profits but also by the need for the timely repayment of loans and interest. Secondly, we have an unjustified economizing on capital investments for the development of the material-technical base of peasant (farmer) enterprises. The latter will unavoidably slow the pace of intensification of farming and livestock raising and consequently, the pace of increasing the volume of agricultural production output.

We must also consider a number of other difficulties that are not directly related to the agricultural economy but which we will immediately face if private land ownership goes into effect. Among them let us note first and foremost the possible development of acute conflicts with previous landowners. For Belorussia, especially for its western regions, where many village residents to this day have their deeds to formerly-owned land, this problem is not an idle one by far.

Especially heated passions can be expected if a decision is made to initially sell the land into private hands at depressed prices, which will give rise to great opportunities for rich profits during subsequent resale according to normal prices. Although good intentions are attributed to this proposal at times (to decrease financial difficulties for farmers as they acquire land for private ownership and purchase other needed production tools), the negative consequences of its implementation can be much more weighty.

In this regard private land ownership, if it becomes widespread, will have a special effect on those who are in regions that have suffered from the Chernobyl nuclear reactor catastrophe. Each time that it will be necessary to solve a practical resettlement problem, that of moving to a new locality, the village resident from Khoynikskiy or Krasnopol'skiy rayons will certainly come across an owner of "clean" land. No exhortations to leave some space for his suffering brother will help.

We must not forget another aspect of this problem. Under conditions of private ownership it will be much more difficult to implement a single state policy in the area of efficient use of natural resources. This refers first and foremost to land reclamation, to protecting the soil against wind and water erosion, and to the organization of territory requiring a comprehensive approach based on a consideration of the interests not only of all branches of the national economy but also of those of the population living in a particular territory.

Proponents of private land ownership promise to compensate with interest for all of these concerns and difficulties, which with logical unavoidability will crash down on our heads as soon as private land ownership is introduced, by rapidly producing an abundance of food. Of course the promise is attractive, especially if we consider the current state of affairs regarding supplying the population with food products. But one question does remain: Can we naively believe these promises? Will we not find ourselves again next to a broken carriage if, without carefully weighing all the "pro's" and "con's," without thinking, we throw ourselves into the iron grasp of private land ownership?

Before deciding finally on such a responsible step we must clarify how realistic the promise is of rapid agricultural improvements after the introduction of private land ownership. In arguing in support of their point of view, proponents like to cite the experience of the capitalistic West. Sometimes one hears someone ask why we should reinvent the wheel. In the leading countries of the West private land ownership prevails and there is no food problem there. On the contrary, there is the problem of selling food. Only these proponents do not want to think seriously about the question of why in neighboring Poland the table has not been covered with food although there private land ownership has never been eliminated. Moreover, in Poland private land ownership always occupied the leading position. In other words, in no case should we blindly copy foreign experience no matter how enticing it appears at first glance.

During the long years of existence of kolkhozes and sovkhozes in our country more than one generation of peasants has been replaced. With each new generation the notion of state land ownership became more and more a part of them. Thus today we should not assume too much that village workers will easily reject state ownership by agreeing to a radical restructuring of their entire way of life.

We must also take into account that our agricultural machine building is oriented toward satisfying the demand for technology first and foremost of large agricultural enterprises. Its reorientation toward satisfying the needs of peasant (farmer) enterprises is not a simple matter by far, as some may think. It will require considerable time and resources. Today we have a great deficit of both the former and the latter.

In addition, private land ownership is not mandatory for a peasant to feel that he is the real manager. Let us look as an example at the private enterprises of kolkhoz farmers and sovkhoz workers and the orchard-garden partnerships of city dacha residents. As we know, both forms of management are based on the land, which is the people's property. This does not in any way prevent village or city residents from exhibiting an assiduous attitude toward the land on their private plots or dacha grounds, where they cultivate large harvests from one year to the next. Some of them are creating miracles, having creatively assimilated the wisdom of scientific agriculture. There are many cases in which previously inconvenient lands have been transformed into productive gardens that amaze our imagination.

In practical terms what can be done to emancipate the peasant and to create all of the needed prerequisites for the development of his economic activeness and creative initiative without introducing private land ownership? First of all, a real opportunity must be provided to allow the peasant to select the management form that suits him best. Moreover, this opportunity must not only be secured by the law but also by the creation of objective and subjective prerequisites necessary for the effective functioning of each form of management.

Today the law guarantees peasants management by any form of agricultural production, including the individual peasant enterprise. In connection with the Belorussian SSR Land Code for citizens who have expressed the desire to manage a peasant enterprise based primarily on individual labor and the labor of family members, land parcels that are average in size (per family), in fertility and in location relative to a specific enterprise are provided for lifelong, inheritable use or leasing.

As for the acquisition of land parcels that exceed the indicated average parameters, the peasant family must acquire the right to these by agreement of the remaining families living in the same village. Otherwise the realization of the economic interests of some families can result in an unjustified infringement upon the interests of their neighbors.

In order to have the peasant who has received land for management and lifelong use feel that he is its master and give the necessary attention to increasing soil fertility, the law establishes the right of inheritance of the land parcel by one of the members of the peasant family—the spouse, one of the children, the parents, or relatives who lived together with the family and who helped to manage the enterprise. In addition, they have

the right to ownership of all investments made in the land that have been carried out with the goal of increasing soil fertility or of improving organizational-technological properties, of all production capital acquired for the effective management of the peasant enterprise as well as of the residence and outbuildings and the product of work that is obtained as a result of the efficient utilization of land parcels. If for some reason competent state organs decide to withdraw the land parcel, the law requires that the family be provided with another land parcel that is approximately equivalent in size and quality to the first and that the family be reimbursed for all investments made to improve the first plot and for all additional expenditures related to the move to the new parcel.

If in addition to everything that has been mentioned above peasant (farmer) enterprises and all other forms of management, not excluding kolkhozes and sovkhozes, are given the right and real opportunity to make their own decisions about what to produce and how and about to whom to sell and at what prices, there is no doubt that the economic activeness and creative initiative of peasants will be fully evident. This will be the case especially if in addition a successful solution is found to the problems of material-technical supply of agriculture, the social restructuring of the village and the radical curtailment of losses in agricultural products during the process of industrial processing, transportation and storage. Then we can hope that the solution to the food problem, which we are debating so frequently and so fervently today, will come in the near future.

#### Moldovan Deputy on Multiplicity of Forms

*914B0159B Kishinev SOVETSKAYA MOLDOVA  
in Russian 3 May 91 p 2*

[Article by V. Lebedev, SSRM [Socialist Workers' Youth League] people's deputy and candidate of legal sciences: "Should Land Be Sold to the Peasant?"]

[Text] The developing market relations within Moldova's agroindustrial complex require the equal development of a multitude of forms of property and management: kolkhozes, sovkhozes, cooperatives, farmers' enterprises and small private enterprises. Of course all of these free commercial producers must have equal rights in regard to land use. For this reason, the Moldova SSR Land Code passed by the Supreme Soviet at first reading allows for the right to buy and sell land in addition to collective and private land management with a consideration of the Property Law. However, this situation has given rise to a variety of reactions among specialists, directors of enterprises and scientists.

It should be noted that the new republic law created by the present parliament determined the multi-level structure of our economy, which to a definite degree has already affected the agroindustrial complex with its special production and historical characteristics.

Agricultural cooperatives and farmers' enterprises are appearing in villages.

It would seem that the situation has been ultimately clarified. Yet meanwhile, as before, calls are heard on newspaper pages and television screens: we need a free peasant, only he will feed the republic if we give him the land! Behind this demand lies the demand to dismantle the kolkhoz system and to replace it with the private peasant enterprise. In my opinion, this is a very dangerous exhortation.

The authors of the given proposals do not burden themselves with any weighty arguments in favor of private enterprises, do not try to even look into the future in passing or to imagine possible socio-economic consequences of the private peasant path of development of the village. It is sad but true—they are sinning against the truth in assessing the possibilities of a private peasant enterprise not only in contemporary life but in the past as well. Anyone who doubts this should look at official statistics. On the eve of the First World War the empire's fields yielded about 64 million tons of grain. In the most productive year of 1913, 86 million tons were harvested. Yet "unfortunate" kolkhozes and sovkhozes supplied the country with over 110 million tons of grain in warehouse weight in the early 1950's, the "hungry years." It should be added that the peasants of pre-revolutionary Russia, including those of Moldova, rarely used the wheat they produced, and the people saw very little wheat grain.

Thus those who maintain that our republic's kolkhoz workers are nothing more than day laborers who have nothing in common with genuine peasants have long needed to apologize to village workers. The idea that kolkhozes are incapable of feeding Moldova is simply a gross and tendentious lie.

No, kolkhoz farmers are genuine peasants capable of dealing with the republic's food problem, but only with normal material-technical supply and dependable work and living conditions. We must bow deeply to them for their selfless labor.

Economic science in the late nineteenth to early twentieth centuries attempted to represent the peasant in terms of his right to land ownership. However, the contradictory opinion also existed. In this way, today's specialists and current-affairs commentators do not have the categorical basis to include among the ranks of the peasants only representatives of private peasant enterprises, tying them to land ownership.

The peasants make up the majority of our society, and their characteristic features are their way of life, work and everyday existence on the land regardless of the form of production operations.

In praising the private sector of agriculture, the authors of the alternative variant of the Moldova SSR Land Law insisted on the rejection of state land ownership, its replacement by private ownership and only in some

cases by collective ownership with the right to buy and sell land and consequently to mortgage and lease it.

Let us try to imagine the possible consequences of this law. The replacement of today's existing right of state land ownership, the right of land use (land management) by the right to land ownership by the kolkhoz, cooperative or peasant enterprise in my opinion signifies a serious step backward in socio-economic relations.

K. Marx, who was an economist, noted more than once that private land ownership in contrast to private ownership of other means of production is not a necessary condition for the capitalist method of production. It makes it more difficult for capital to penetrate agriculture. Even under conditions of a capitalist structure state land ownership is possible and tolerable.

The well-known scholar, economist and agrarian A. V. Chayanov in 1917 explained his position on this question in the following manner: "For the people what is important is not land ownership but access to the land and no interference with his efficient and productive work there. It is also important for him that the land not accumulate in the hands of rich individuals."

It is essential to precisely and clearly elucidate that Moldova's land is an inviolable treasure that should not be traded, mortgaged or remortgaged by people who protect themselves with euphonious phrases about "civilized countries" and "market relations." Land is the property of all of people of Moldova, and it is intolerable to divide this property into the property of patrimonial farmers.

On the other hand, in terms of demographic features and a limited land reserve it is incorrect for the republic to compare the possibilities of private land ownership on the expanses of the Russian plain and in the countries of Northern Europe with the situation at home.

Private land ownership in so-called capitalist countries has long been recognized as the remnant of feudal relations and, in the opinion of Western scholars, fulfills only a "social function." It is for this reason that in these countries a system of limiting rights to land ownership and other estate laws developed to successfully facilitate efficient land use. Moreover, this system of limitations is so extensive that basically the right to land ownership is limited to the right of land use, which still exists in our law as well. It is another matter that in contemporary Western law priority is given to enterprise regardless of form and method of land use. There is especially great concern regarding leaseholders. It is my deep conviction that agricultural reform in the republic must be directed first and foremost at the transformation of kolkhozes and sovkhozes into collective agroindustrial enterprises. What are their characteristics?

Common to all of them is unification of labor and property within the framework of a single separate collective, i.e., each person working in the collective agroindustrial enterprise is a participant in property

relations and a unique worker and co-owner with a certain share of fixed capital depending upon his work record in the collective and his qualifications. From here it follows that the kolkhoz farmer or sovkhoz worker has the right to receive not only wages and payment in kind but also income from his share (contribution) to the property of the collective agroindustrial enterprise in the form of annual dividends (interest). Moreover, if the individual leaves the collective legally he or his heirs have the right to receive a share of the enterprise's property.

The attempt to focus on small peasant enterprises means ineffective capital investments because of the enterprises' small size and limited possibilities for introducing scientific achievements and progressive techniques and technology. Propaganda on the joys of the individual peasant farm in Moldova within the context of the current status of the infrastructure, material-technical supply and future supply is doing nothing other than leading the population to a dead end and reflects a lack of basic responsibility to the people.

Many scholars and current-affairs commentators consciously ignore the fact that in all of Western Europe and in the U.S. there is an ongoing process of elimination of not only small but also mid-sized peasant enterprises.

Let us present some data. In 15 years, from 1970 to 1985, the number of peasant farms in Germany decreased by 32 percent, in Holland—by 27 percent, in Belgium—by 47 percent, in Denmark—by 37 percent, in Great Britain—by 29 percent, in Austria—by 27 percent and in the U.S.—by 25 percent.

In social terms the law to create land ownership in the republic will mean its introduction into monetary circulation, speculation, an abrupt social stratification as at the stage of initial accumulation of capital, and other negative tendencies. Let us suppose that the supporters of the alternative variant of the Land Code subordinate its basic content to the interests of citizens, especially of individual peasants, and that this draft law is passed. One must wonder whether these supporters imagined that by doing this they placed future farmers into a situation without alternatives. The simultaneous proclamation that individuals and kolkhozes and sovkhozes (it should not be otherwise) are property owners signifies that it is impossible for the peasant and for the citizen to receive or purchase land because soviets will basically be deprived of the right to redistribute land (let me emphasize once again that we, unlike Russia, have no free, empty lands) belonging to kolkhozes and sovkhozes as legal property.

Giving the right of land ownership to its actual users will create unforeseen complications in transferring the lands of kolkhozes and sovkhozes for non-agricultural purposes. Soviets will be forced to buy this land (yet they have no money and will not have any in the near future) and then sell it to persons who will build their own houses on it. In this case soviets may suffer great losses. In general private land ownership will bring great losses to the Moldovan government.

The securing of the right to leave the kolkhoz or sovkhoz with a land parcel can remain only a declaration.

While recognizing the variety of forms of property and of management we should nevertheless not confuse these concepts by identifying them with each other. The free single peasant enterprise can be carried on either with the right to primary land use or on a lease basis. The matter has nothing to do with the form of property, after all. It is unfortunate that through the efforts of a few organs of the republic press and of television, some kind of fetish of private property of the kind that existed during the epoch of the transition from feudalism to capitalism has developed in the minds of many. This is a grave error. With any form of ownership (including by the state) it is possible to create favorable conditions for management and enterprise. Some beginning farmers also understand well the negative consequences of land distribution and the transfer of land into private ownership. They have spoken about this on numerous occasions and it would not be a bad idea to listen to their not yet loud voice once again.

## POST-PROCUREMENT PROCESSING

### Animal Product Procurements Decline

914B0175B Moscow SELSKAYA ZHIZN in Russian  
24 May 91 p 4

[Unattributed article under the rubric "You Wanted To Know": "Why Are the Store Counters Empty?"]

[Text] Lately, we have noticed a shortage of meat, milk, and eggs in our stores. What is it—insufficient agricultural production or disorganized trade?

#### From letters and calls to the editor:

Here is some information on the procurement of animal products in all categories of farms (in thousands of tons) for the first quarter of this year, as compared to the same period of last year.

	1991	1990	Percentage
Cattle and poultry (live weight)	4620	5381	86
Milk	13373	15259	88
Eggs (millions of)	11735	13630	86

Compared to the period from January through March of last year, Armenian farms cut down on the sales of meat and milk to the purchasing organizations by approximately half, Georgian farms reduced the amounts by more than a third, Moldovan farms sold almost a third less meat, and farms of Kyrgyzstan, Estonia, and Tajikistan reduced their sales by one-fourth.

## AGROTECHNOLOGY

### Grain Requirements, Utilization Discussed

#### Imports vs Domestic Sufficiency

*914B0174A Minsk BELORUSSKAYA NIVA in Russian  
26 Feb 91 p 2*

[Article by S. Skoropanov, academician of the All-Union Academy of Agricultural Sciences imeni V. I. Lenin and of the Belorussian SSR Academy of Sciences: "Grain. Bread. How Much Do We Need?"]

[Text] With good reason people identify grain with the concept of bread and in a broader sense with food. The food problem has a beginning, but does not have an end. Therefore, farmers constantly face the task of increasing grain production.

According to the yield of grain crops in Belorussia we have subdivided the 45 postwar years into three periods: first, 1945-1955; second, 1956-1965; third, after 1965. The yield of the first period was determined basically by the incomplete realization of natural fertility and did not exceed six to seven quintals. A relatively full utilization of natural fertility is a characteristic feature of the second period. The yield increased approximately one- and a half-fold, totaling about 10 quintals. The period of rise in the industrial level of farming is the third period. It is a matter of a scientific organization of farming and utilization of chemical products, drainage reclamation, mechanized technologies, and so forth, which characterizes the policy of expanded reproduction of soil fertility. The yield of grain crops has reached 30 quintals per hectare. During this period the average annual increase in the yield exceeds 80 kg per hectare. There has been no such increase in a single country in the world, with the exception of China, where it has amounted to 110 kg per hectare. In the last 25 years gross grain production has tripled. This has occurred exclusively owing to an increase in the yield, even with some reduction in the area of the grain wedge.

However, life goes forward. New ideas, principles of work organization, and new guidelines are being born.

Therefore, the newspaper's editorial board acted correctly in inviting practical workers, specialists, and scientists to discuss the article by Doctor of Agricultural Sciences V. P. Samsonov on problems of our grain field "How To Make Fresh Advances?" (see SEL-SKOKHOZYAYSTVENNAYA GAZETA of 6 December 1990).

First of all, about the author and his article. Vladimir Pavlovich is a well-known scientist and needs no publicity.

Almost the same can be said about the examined article. It sets for the established principles of organization of grain production in the republic in a relatively accurate manner. My views were the same. The stability of the course and its conservation as a whole deserve a positive evaluation, especially as such a course is also confirmed by practice. As is well-known, however, the better is an enemy of the good. There is no doubt that time and accumulated experience must be constantly subjected to a critical analysis. At the same time, the main goal is the same: to take what is better for the new stage, the stage of market relations, to say thank you to the obsolete and less effective, and to consign it to historical oblivion.

And so, the first question: How much daily bread—grain—does man need? The "axiom"—one ton of grain per capita—has been prevalent in the country and, especially, in Belorussia for more than three decades. The author of these lines was an active propagandist of this dogma. It is virtually impossible to establish who is its primogenitor and what are its principles. Most likely, our "planners" borrowed such a model from the United States.

In the last few years the republic's kolkhozes and sovkhozes have produced about eight million tons of grain, or approximately 800 kg per capita. Moreover, thanks to someone, for a number of years we have been importing up to five million tons of grain. A total of 1,200 to 1,300 kg of grain per capita are utilized. However, what is the indicator in other developed countries? It is a matter of its direct consumption and utilization as fodder. According to FAO data from various years, this picture looks as follows: the USSR—about 600 kg; the United States—650 kg; the FRG and Great Britain—within 400 kg; Denmark—more than 1,000 kg; India—about 200 kg. These data indicate that our Belorussia holds a world record.

Such a "detail" as the share of consumed grain in animal husbandry is no less interesting. In the USSR it ranges within 65 to 70 percent, in the United States, 80 to 85 percent, in the FRG and Great Britain, about 75 percent, and in Denmark, more than 90 percent of the total volume of its utilization. We do not have statistics for our republic. However, it is not difficult to reproduce it. A direct consumption in food is well known. It totals 123 kg, which is 77 kg less than was the case one-quarter of a century ago. Animal husbandry accounts for the bulk of the utilized grain. It turns out that here we are on a par with Denmark. Our difference lies only in the efficiency of the animal husbandry sector. Milk yields and meat production per animal in our country are almost one-half of those in Denmark.

Two reasons for such a wasteful utilization of grain in animal husbandry are clearly observed: the insufficient competence of managing structures and the economic

and ecological underestimate of the role of cultivated grass sowing. About 25 to 30 years ago the Soviet Union annually exported approximately 5.5 million tons of grain and imported about 1.5 million. Now, however, without proper grounds, from an exporter it became a big importer. Unfortunately, the imports are not substantiated. Their idea was not born in scientific circles, but in secrecy—in management circles. The idea of the production of 300 million tons of grain in the country and even a relatively full program have been developed by science more than once. The last time, when I was its active organizer and co-author—for the July (1978) Plenum of the CPSU Central Committee. The program was approved by F. D. Kulakov, secretary of the CPSU Central Committee at that time. However, it was not heard. The consequences: Fedor Davydovich departed from life and the author of these lines, from Moscow.

The flourishing of the Union's import passions and its distributive role aroused the appetite of republics, including Belorussia, for tearing away the biggest possible piece of the Union loaf of bread. In our opinion, the main motive for our grain imports lies in this. Is it justified? No and only no. Let the reader judge for himself. Gross grain production in the country amounts to more than 200 million tons. This totals 650 to 700 kg per capita. Of course, the export opportunity is ruled out in this case, but, as world experience, primarily that of West European countries, indicates, this is sufficient for internal consumption—sufficient if it is utilized efficiently in animal husbandry and if cattle is raised mainly on grass feed.

FAO experts forecast that before the end of the century the level of grain consumption in the world will total about 100 kg per capita. It will decline in developed countries and rise in developing countries. Thirty years ago 200 kg of bread per capita were consumed in Belorussia and, according to 1983 data, 123 kg. If we assume that such a level will also remain (which is hardly probable) in the future and the population will increase to 11 million, the need for grain for food purposes will total about 1.4 million tons. We will add to this approximately 1 million tons of seed reserves and about 250,000 tons of carryover reserves. The total need is about three million tons.

With regard to fodder grain, its volume is largely determined by the scientific level of animal husbandry management. If we are guided by such developed European countries as Great Britain and Germany, its optimum is within 300 to 350 kg per capita. For the conditions of Belorussia this is less than four million tons, which is one-half of the present volume. Thus, in order to meet intra-republic needs, with a scientific organization of work the grain volume that we have already reached is sufficient.

However, the country and the republic are entering the stage of market relations. Under these conditions the "closed" cycle is not very suitable, to say the least. Of course, the republic's population of 10 millions cannot

do without some imports. For direct consumption it is necessary to import rice and a little high-quality wheat. Intensive poultry breeding is virtually impossible without such an energy carrier as corn grain. However, even here Gomel and Brest oblasts can meet their needs themselves. Consolidated calculations show that the volume of grain imports into Belorussia can be reduced to one-half.

However, money, including foreign currency, is needed even for small imports. In connection with this the republic faces a new problem—the problem of exports of grain, the demand for which will remain in a number of the country's regions. The republic's kolkhozes and sovkhozes can—and this is advisable—export winter rye grain for lovers of black bread and bread kvass. However, this is possible only with one mandatory condition: the quality of grain should meet world standards. Unfortunately, it does not meet even the lower requirements of the Union market.

It is not easy to establish the volume of possible grain exports from Belorussia more or less definitely. The market itself will do this. It seems, however, that they are possible in a volume of 2.5 to 3 million tons. Thus, the general orientation leads to a total production volume within 10 to 11 million tons.

How is it more expedient to reach such a level? First, a long-term forecast (20 to 25 years) of the development of the grain market in the world, the country, and the republic. Such forecast studies are carried out in the United States, England, and other countries. Public organizations, such as "100 Quintals Clubs," actively operate in England and France. Farmers, who have reached such indicators, are given incentives. However, there are also objectors: such a high concentration of grain crops resembles the concentration of animals at large industrial-type complexes with all their negative consequences. Advocates of 100-quintal harvests counter: on a smaller area it is easier to maintain a strict technological regime ruling out the negative. It seems that principles concerning such an organization of the development of a long-term model are also useful to us.

It is only to be regretted that the initiative of agronomist Melnikova did not receive proper support and that the book generalizing foreign experience, which was published by the Gomel "100 Quintals Club" in 1988, apparently has not reached agronomists.

The following is also practised abroad: science develops several levels of intensification of grain production with an economic and ecological evaluation of each of them. The farmer himself determines what level of intensification suits him most.

For now the republic does not have a long-term forecast, but it needs it as a scientific guideline. The forecast yield level predetermines the necessary area. Apparently, 50 to 60 quintals per hectare can be forecast as an expedient long-term yield. In this case the area of grain crops will total more than two million hectares.

In order to reach the forecast yield, at least three groups of factors must be activated: prevention of losses (or at least their reduction to a minimum), improvement in the structure of the grain wedge, and, finally, rise in the level of intensification. A position, when intensive technologies are put in the last place, may seem erroneous. In the country, people say, there is an orientation toward intensive technologies. This is correct. However, it is also correct that Belorussia has already reached a high level of chemicalization—a key factor in intensification. If it is measured in terms of artificial fertilizers per capita, we hold the world record—approximately 200 kg of NPK in the active substance. If losses are prevented and everything that grows in the field at such a fertilization level is gathered, the yield will total more than 40 quintals per hectare. So big are the losses.

Owing to the big losses, the return on expensive mineral fertilizers is low. Moreover, the latter are far from flawless even with their relatively competent utilization. This still continues to be a major potential for the growth of a high-quality harvest and environmental protection. Problems of a sensible utilization of resources are important always and everywhere, no matter how many of them exist. However, for the conditions of Belorussia this is one of the most important tasks now.

An increase in the proportion of corn, rice, wheat, and barley in the sowing and, especially, in the gross output of grain is a characteristic feature of the development of grain farming throughout the world during the postwar years. At the same time, rye and oats are reduced everywhere as less productive. Spelt wheat and lupin have disappeared completely and buckwheat is on the verge.

Possibly, the Americans were the first to see the great advantage of corn. They formed a specialized corn belt. The proportion of the grain of this crop reaches one-half of its gross output. Apparently, Romania was the first in Europe to recognize its value. England and Germany "woke up" in the last 15 to 20 years. The proportion of corn in these countries is growing rapidly, now comprising 20 to 25 percent of the arable land.

It seems strange that in these countries corn crowds such a protein crop as lucerne. Research has established that, all things being equal, in the output of protein per hectare corn is inferior to lucerne approximately by five percent and in energy surpasses it by 10 to 15 percent. According to the evaluation of foreign scientists, the shortage of protein can be compensated by synthetic nitrogen compounds, primarily for ruminants. The world does not yet know of a similar energy compensator.

With regard to our country, having vast opportunities to produce no less than 100 million tons of corn grain, it continues its traditional lethargy. Against this background Belorussia's positive features are fully noticeable. People who come from my area—Gomel Oblast—are the initiators of this. There is reason to assume that

under the conditions of Gomel and Brest oblasts grain corn can become the leading fodder grain crop capable of yielding 100 quintals of grain per hectare.

If to follow the experience of Germany, where corn cultivation, which is "new" to it, occupies almost one-third of the arable land, this example is worthy of imitation. Let us assume that, as the first step, only 150,000 hectares of arable land are assigned to corn. Even in this case the gross output of dry grain will total about 1.5 million tons. For now this is close to fantasy, but one that leads to progress.

Triticale—a crop of a high fodder value—has great possibilities. Appropriate scientific and practical experience has already been accumulated. If it is taken into consideration, there is reason to assume that this crop will be a serious competitor of winter rye, at least in volumes utilized for grain fodder.

Thus, kolkhozes, sovkhozes, and other enterprises in the republic—of course, during the transition to market relations—have a big potential in grain production. Stressing the importance of the transition to the market, it is appropriate to note that, owing to a number of reasons (objective and subjective), conditions for entering the market with only one foot are created not only for the producer of grain, but of other products as well. The other foot continues to remain within the framework of the command system in the form of the state order.

Under all conditions the balancing of imports and exports is the first link in the scientific organization of grain production. This is accomplished not in one hour, but according to the following formula: hurry at a leisurely pace. We would like to complete the second millennium with the production of a minimum of 10 million tons of grain and with a grain crop area totaling two million hectares and, perhaps, more than that. There is an obvious predominance of grain fodder in its production structure. With the increase in the volumes of grain utilized in animal husbandry its share in the annual ration decreases from 30 percent at present to approximately 20 percent. The way to this: grain fodder only in balanced form in terms of the entire circle and, primarily, protein. This is first. And second: to develop cultivated grass sowing in every possible way, which, unfortunately, is still underestimated.

Both dairy and beef cattle can and should be raised mainly on grass feed. Meanwhile, a great deal of grain fodder is still utilized. Is this advisable? Does this correspond to the conditions of the competition and to the producer's striving for the maximum profit? A comparative economic analysis can give an answer to these and other important aspects of feed production.

With the present yield of grain crops amounting to 30 or 35 quintals per hectare the production cost of an unbalanced feed unit exceeds 10 kopecks. Expenditures on balancing do not increase the cost of feed. In pasture feed it is three- to fourfold cheaper. True, in hay produced

according to technically imperfect technologies, which still predominates, in its cost a balanced feed unit approximates a grain unit.

However, if the production of feed from grass is carried out according to modern technologies, it will retain at least 90 percent of the feed value of the green mass. This is one of the major problems, the solution of which brooks no delay.

The second aspect: the expenditure of nutrients on feed production. The useful part of grain crops—grain—constitutes approximately one-half of the total harvest of the above-ground mass. The second half—straw—is a product of little value, but nutrients are also expended on its formation. This is one of the reasons, perhaps the chief one, which prompts breeders throughout the world to develop, as far as possible, short-stem varieties. The useful part of perennial grass approaches 100 percent.

Furthermore, the efficiency of utilization of nutrients in these crops is different. For example, the coefficient of utilization of nitrogen—this powerful yield factor and just as strong a polluter of products and water with nitrates—makes up approximately 50 percent in grain crops and about 80 percent in perennial grass.

Finally, another important indicator—pesticides. For now the harvest of cereal grass—on the order of 80 to 90 quintals of feed units—is attained without toxic chemicals, whereas it is impossible to obtain 40 quintals of grain without them.

Thus, with an efficient organization of meadow farming, basically, the problem of the balance of grass feed in terms of protein is eliminated, the drainage of this land, which does not have a marked effect on the water regime of dry valleys, improves, and the possibility of maximally utilizing solar energy (photosynthetically active radiation), atmospheric precipitation, and ground water is created. Grass protects the soil well against all types of erosion, reduces the application of pesticides to a minimum, almost fully eliminates the pollution of water sources, replenishes the soil well with organic substances, and, on the whole, significantly improves the ecological situation. In all these important indicators perennial grass does not have an equal.

This does not at all mean that grain crops, potatoes, flax, and other crops are not needed. To be sure, they are necessary and important. However, no more of them should be produced than the market demands.

The above-stated does not lay claim to truth. Rather, this is an appeal for thought and for a search for a better organization of the food problem and flourishing of rural areas.

\*\*\*

I ask that the remuneration due me be transferred to the Peace Fund.

### Milashchenko Interviewed

914B0174B Moscow SELSKAYA ZHIZN in Russian  
22 May 91 p 2

[Interview with N. Z. Milashchenko by Yu. Baklanov: "How Much Grain Do We Need?"]

[Text] People throughout the world have been told over and over again that the essence of the food problem lies in the shortage of protein. Nevertheless, a change in state investment policy, in order to make up for this shortage, is made extremely slowly. We still transport across the ocean wheat instead of soybeans, feed it in tremendous quantities to livestock, and pour lactoprotein into the sewer system. How long will the wastefulness of resources continue?

In our opinion, there is a need for a single concept of protein production and for the most rapid development of resource-saving technologies in the storage and processing of agricultural raw materials on the basis of world experience and developments by our own scientists, which will make it possible to sharply reduce the disastrous grain purchases. Meanwhile, to this day we have had occasion to hear that we only have to increase the grain harvest throughout the country to 25 quintals per hectare and all the problems will be solved. "Is that so?" I asked N. Z. Milashchenko, vice president of VASKhNIL [Academy of Agricultural Sciences imeni V.I. Lenin], at the beginning of our conversation.

[Milashchenko] Of course, not. It should be frankly stated that the task of producing one ton of grain per resident in the country, which was put forward several years ago, is unrealistic, owing to the shortage of resources. Although, in order to provide the population with food by the traditional methods of using grain fodder, in fact, 285 to 290 million tons of grain are needed, of which 168 million tons will go into fodder.

[Baklanov] But this is a senseless waste...

[Milashchenko] Precisely it takes place in our country. With such an estimate, which I discussed above, during unproductive years imports will have to be increased, not decreased, to 60 million tons. This is doubly unrealistic, taking into consideration the most acute currency shortage.

[Baklanov] What is the way out of the deadlock?

[Milashchenko] We have developed the "Green Complex-2000" Program, which includes a broad spectrum of directions and methods of increasing the yield and storing and utilizing grain efficiently. In particular, it is proposed that areas for the development of intensive technologies be increased.

[Baklanov] Excellent tasks were also set earlier. But we lived to see irregularities with bread.

[Milashchenko] However, is it the fault of science that the genetic potential of new varieties, which makes it

possible to obtain, for example, 80 to 100 quintals of grain per hectare, is utilized only 30 to 50 percent? No, the harvest deficiency occurs because of shortcomings in seed growing and gross violations of varietal agrotechnology. We propose that seed growing be transformed into an independent sector with the establishment of specialized associations and firms and with the development of scientific production associations and systems. The list of specific measures of a technological, economic, and organizational nature aimed at increasing the yield is too long even for a short enumeration. I will only note that their practical realization has made it possible to grow a good harvest last year.

[Baklanov] The traces of which are still sought in the country? It appears that some people realize that a significant part of the grain immediately got into feeders and was fed to livestock with low efficiency.

[Milashchenko] Unfortunately, this is precisely so. The more grain we produce, the bigger its direct and hidden losses. Owing to the protein shortage, the latter reach 40 million tons annually.

[Baklanov] Several countries can be fed.

[Milashchenko] Yes. For us, too, only 50 million tons of grain are sufficient for food purposes. In order to sharply reduce losses, it is necessary to urgently develop in every possible way the material base for the cleaning, storage, and processing of grain at places of production. It is necessary to increase capital investments for the construction of modern inexpensive grain storage facilities and small mixed feed shops, the complete equipment for which can be manufactured jointly with foreign firms at the base of existing plants. In this case it will be possible to specialize some state mixed feed plants in the production of protein-vitamin additives, premixes, starter mixed feed for young stock, and special mixed feed for large animal husbandry complexes. It is high time to organize a differentiated production of mixed feed for pasture and stable feeding of animals. Pasture grass has sufficient protein. During this period low-protein mixed feed should be used in dairy animal husbandry. This will make it possible to save in the country more than 500,000 tons of protein equivalent to 1,250,000 tons of oil-seed meal, which is so necessary in winter.

[Baklanov] And then it would be possible to rectify the situation in poultry breeding, again eliminating eggs and broiler meat from the category of scarce products?

[Milashchenko] If a structural reorganization of feed production is carried out simultaneously. Look what has happened in the nonchernozem zone. Many mechanized poultry farms and hog complexes have been built. More than 20 million tons of grain are brought here from Kazakhstan, the North Caucasus, and abroad. As soon as the administrative dictate on the part of central executive power was weakened, state bins ceased to be filled and mechanized poultry farms and complexes in the region were on starvation rations. In this region in the future it is more sensible to increase the production of

feed of nongrain origin on natural land and to develop neglected land, of which there are 12 million hectares. This will make it possible to save a minimum of 20 million tons of grain.

If the cultivation of early-ripening and medium-early cold-resistant corn hybrids on an area of about 16 million hectares is developed, it will be possible to obtain a grain-cob mixture and concentrated silage equivalent to 13 or 15 million tons of grain. There are also real possibilities for an increase in the production of corn grain—up to 27 million tons and more.

If we are able to bring the gross output of oil crops up to 10 million tons (through an expansion of areas sown with soybeans, rape, and sunflower seeds) and of pulse crops, up to 21.5 million tons (having increased the output of peas, vetch, lupin, fodder beans, lentils, and other crops), we will be able to give up imports of vegetable oil and meat, to reduce purchases of oil cakes, and, on the whole, to decrease the expenditures on the purchase of agricultural products abroad to one-half.

[Baklanov] Will we still import wheat?

[Milashchenko] No. However, for this it is necessary to increase the production of high-quality spring durum and strong wheat varieties. The retooling of milling plants will increase the output of flour by two percent, which is equivalent to  $\frac{1}{2}$  million tons of high-quality wheat. A change in the assortment of bread and flour products with an increase in the baking of wheat and rye bread, diet bread with bran, and bread from rolled grain will also save up to two million tons of food wheat.

An improvement in the structure of grain resources will reduce its use in mixed feed from 32 to 12 percent. The new structure of concentrated feed will give a total saving of grain used for fodder in the volume of 33 million tons.

[Baklanov] Will an end finally be put to grain doping? What will we begin to buy?

[Milashchenko] At first more soybean oil-seed meal and protein and then we will increase purchases of soybeans.

[Baklanov] However, the industry for processing them is extremely weak in our country.

[Milashchenko] It is necessary to build new and to reconstruct existing enterprises in order to bring their total capacity up to 22 million tons. A large Soviet-Swedish Rape Processing Plant is beginning to be built in Lipetsk this year. In all, four billion foreign currency rubles will be needed for these purposes. However, I would like to stress right away: we do not demand that currency expenditures be increased. Conversely, the realization of our proposals will make it possible in six years to save 18 billion foreign currency rubles as a result of a revision of the import structure and investment policy.

[Baklanov] It is also possible to save financial, as well as energy, resources, which is extremely important for the country, through the use of plant protein directly in food.

[Milashchenko] In fact, at this stage of world civilization this path is of primary importance. Incidentally, protein of plant origin is much more useful to people (especially, middle-aged). On the other hand, this is very advantageous economically.

[Baklanov] According to press reports, the Tokyo Food Institute has developed a recipe of soybean schnitzels, which are 25-fold cheaper than beef schnitzels, but in palatability are not inferior to them.

[Milashchenko] Yes, Japan and the United States are ahead of other countries in this respect. In the United States in any hotel you will be offered natural cow and soy milk in packages. And there is no difference in taste. Holland and Denmark, with their surplus of natural milk, also produce soy milk, because 20 percent of the population does not tolerate cow milk owing to lactose. But in our Central Asia, with the most acute shortage of protein, even children's diet has neither.

We must finally realize that in the very near future not everyone can be fed animal protein and that the entire world follows the path of utilization of plant protein and increases the consumption of vegetable oil. But in our country there is one definite direction: give us sausage, give us creamery butter! Abroad there is the broadest spectrum of meat products with isolated plant protein, which lowers the cost of food to one-half. In the United States from 1975 through 1989 the consumption of isolated, concentrated, and textured protein increased from 85,000 to 430,000 tons, but in our country it remained at the previous level—15,000 to 20,000 tons. Thus, all developed countries attain vast savings of funds. We, however, do nothing for this. The use of only 50,000 tons of soybean isolates and concentrates equivalent to 250,000 tons of meat makes it possible to reduce grain purchases by two million tons and to save more than 250 million dollars.

Therefore, we propose that the structure of purchases be changed and that technological equipment be purchased with the saved currency. The Protein Technologies International Firm, with which we have cooperated for a long time, offers "supro" and "proplas" protein for children's diet. One ton of such protein saves 5,000 tons of meat and 2,000 tons, 21 million U.S. dollars, as compared with meat imports. It is used in school meals in the United States and many other countries.

[Baklanov] Most likely, however, the protein problem should also be solved through a reduction in the losses of produced livestock products?

[Milashchenko] For the population's diet we need three million tons of animal protein. But in milk alone we lose one million tons of it! A total of 700,000 tons of it can be returned for the diet if elementary order is introduced into the processing of raw materials. We produce more

milk than anyone in the world. Nevertheless, we do not have enough milk products, because we have not learned to use skim milk. We feed a vast quantity of skim milk to livestock and pour out whey into the sewer system. The whole world has changed over to substitutes, but we feed whole milk to heifers. According to a worthless tradition, for the sake of butter production we remove only fat, but not protein. If we removed both, we could additionally allocate five million tons of whole milk and 20 million tons of skim milk for the population's diet. At the same time, we would save up to 25 million tons of feed units, including eight million tons of grain as high-grade concentrates.

According to calculations by the All-Union Scientific Research and Design Institute of the Dairy Industry, if to follow traditional technology, even in 1995 no more than 40 to 50 percent of the needs of the population of the Russian Federation for cottage cheese will be met. Scientists at this institute propose that the production of whole-milk substitutes with the use of whey, soybean oil-seed meal, and green-protein concentrates be sharply increased—up to one million tons annually. Capital expenditures on whole-milk substitutes will be recovered in two and one-half years. Expenditures on keeping cows and feeding heifers will be reduced by several billion rubles. By 1995 at 70 ultrafiltration installations it is possible to process about 10 million tons of raw materials, to increase the output of cottage cheese by 12 to 15 percent, and to produce a significant quantity of hard, soft, and pickled cheese. And from whey—protein concentrates, milk sugar, and glucosogalactose syrup.

[Baklanov] With the obvious advantage of the proposed solutions why are they introduced into practice extremely slowly?

[Milashchenko] In my opinion, two basic factors hamper their realization. In the dust of political battles parliaments and governments seemed to forget about scientific and technical progress and about the need to master modern technologies. Second—the lack of interest on the part of labor collectives in the production of inexpensive products. Look, prices of skim milk, which were set as far back as the 1930's, are 18-fold lower than those of whole milk. Although it does not contain fat, it is rich in protein and vitamins. Here, just as, for example, in the cultivation of high-quality wheat, protectionist policy on the part of the state is needed. An economic mechanism, which would interest people in mastering waste-free technologies, is needed.

## LAND RECLAMATION, WATER MANAGEMENT

### Reservoir Not Drained, Flooding Results

914B0169B Moscow SELSKAYA ZHIZN in Russian  
15 May 91 p 6

[Report by SELSKAYA ZHIZN correspondent V. Goncharov: "Chaos: The Critical Mark"]

[Text] There was not much snow in our parts this year. It has been melting relatively uniformly. Thus, the spring thaw did not seem to indicate any potential problems. The trouble, however, struck from other quarters.

Normally, in the course of a winter the USSR Ministry of Energy enterprises used to withdraw enough water from the Kuybyshev Reservoir to bring the level to the 48-meter-mark, so the huge reservoir was ready to take in many cubic meters of flood waters. This spring, the water level stayed at the 52-meter mark. Emergency overflow disposal that considerably exceeded the normal water drain at the upper dams of the series of power stations on the Volga and the Kama raised the reservoir level to a 54.4-meter mark. Having overflowed the upper pond and the afterbay at the Niznekamsk Hydroelectric Power Station, flood water rushed unimpeded into the lower

Kama basin and to the Volga. Thousands of hectares of fertile land in Yelabuzhskiy, Chistopolskiy, and Alekseyevskiy Rayons were flooded. The preliminary damage estimate is in excess of 60 million rubles. And this, as they say, is not the end of it.

In its time, the construction of the series of hydroelectric stations on the Volga and its tributaries was billed as the "construction project of communism." In the process of putting up gigantic dams, however, potential negative consequences for the regions adjacent to the river were neglected. Neither are residents' interests taken into consideration in the course of operating the hydrotechnical structures, as we can see. So the flood waters are raging in their fury even during such relatively safe years as this one. People are suffering, and cattle and crops perish.

## POLICY, ORGANIZATION

### Consumer Group Federation VP Discusses New Protection Law

914D0206A Moscow TRUD in Russian 25 May 91 p 2

[Article by M. Polyachek: "From Freedom of Speech to Freedom of Action"]

[Text] The USSR Supreme Soviet has adopted a law that protects the rights of consumers—an unprecedented step for our country. We asked the vice president of the USSR Federation of Consumer Societies, M. Polyachek, to comment upon this event:

It is both pleasing and surprising to note that the law passed through parliament without conflict. I would explain this fact by noting, first of all, that a complete absence of civil rights for consumers is today so obvious to all and infringes upon all of our interests, and thus it simply would be too difficult to object against the conditions of the law. A second consideration in my opinion has to do with the fact that the producers represented in parliament could fight the situation; however, they long ago became thoroughly convinced that regardless of how good the law, it nonetheless would not be carried out by us and so they merely "yawned."

And the document contains many important features. There is one article which makes it possible to seek action in a court in behalf of an indeterminate number of consumers. What does this mean? Earlier, in order to complain to a court regarding a producer of poor quality goods, one had to cite unusual accidents caused by worthless products. For example, a television set bursts into flames. The victimized consumer could launch legal proceedings or rely upon the consumer society for assistance—here we have in mind one single incident. Nevertheless, we are aware that color television sets burst into flames and explode throughout the country as a whole. In the great majority of other cases, we suffer on a mass basis and yet the law provides protection only for individual and especially urgent incidents. Today a legal

decision handed down for such an incident becomes a precedent. Other consumers who suffered from a similar defective product need not institute legal proceedings. They can receive compensation based upon the legal decision already handed down. This is viewed as being of great assistance to them.

I wish to direct your attention to the following: on the day that the law was adopted, a presidential ukase was published which declared the society of consumers to be competent, together with the trade unions, to participate in indexing the population's standard of living. This also provides the society with greater opportunities. An organized consumer is becoming a real force.

It must be confessed: up until now, a consumer, through the society, could complain and hold consultation with a lawyer regarding his rights, which were very limited. At the present time, the consumer societies have been given extensive opportunities for operating independently, including through legal organs. There is also another aspect. The rights of a consumer are set forth rather clearly in civil legislation. But numerous departmental rules have reduced these statutes to nil. Recall if you will how it was easy for you to exchange a worthless article. But in keeping with the reading of the law, Mintorg [Ministry of Trade] was forced to adopt new rules for exchange. These rules take into account the statutes of the law governing the rights of consumers.

And there is still one other consideration: the law was very thoroughly prepared. Its valuable properties include the fact that it is a document of direct action and was prepared in a manner such that it cannot be countered by illegal documents.

We will not flatter ourselves: today we are dealing with monopolistic producers and it is simpler for them to infringe upon the rights of the consumers. And this does not remove from the agenda the question as to whether or not the adopted law will operate in a realistic manner. Or, to put it another way, will the end of the consumer suffering commence in January of next year (when the law enters into force)?

## FUELS

### Oil Production Improvements Examined

914E00924 Moscow NEFTYANOYE KHOZYAYSTVO  
in Russian No 2, Feb 91 pp 2-4

[UDC 622.276; Article by Nikolay Konstantinovich Baybakov (IPNG [Institute for Oil and Gas Problems] of AN SSSR [USSR Academy of Sciences]) and USSR Goskomobrazovaniya: "Use the Wealth of Our Underground Resources More Completely"]

[Text] Editor's note: The author of the work—Nikolay Konstantinovich Baybakov—is a well-known oilfield worker who was at the origins of the birth of the domestic oil industry and was in charge of it for a long time. Employed in high state posts, he constantly followed the progress of oil-industry development.

A wide range of interests and rich production and scientific experience does not leave him indifferent to the oil-industry problems that have been accumulating.

In publishing N. K. Baybakov's work in the journal's pages, we invite representatives of the organizations within whose jurisdiction the problems touched upon lie, to take part in a discussion of it.

Given the situation that prevails in the country's fuel-and-power complex, when the volume of oil recovery and the rate of growth of nuclear power are being reduced greatly in comparison with the previously planned program, urgent measures should be taken to strengthen work in the area of saving energy and increasing the output of petroleum product from refined crude, as well as of increasing the recovery of gas and the mining of coal.

It should be noted that the work to save energy is being done poorly, and the Soviet Union is lagging greatly behind Western countries. Suffice it to say that the power intensiveness of national income in the USSR is 34 percent higher than in the U.S. and almost double that of Western Europe. For indeed it is well known that the costs associated with executing measures to save energy are about one half the cost of extracting the fuel and transporting it to the customer.

The work being done by USSR Gossnab's [State Committee for Material and Technical Supply] scientific-consulting firm Energosberezhniye, which was established in 1988, testifies to great promise in the area of saving energy. In a short time it has developed a number of urgent measures whose introduction will enable, according to preliminary calculations, a saving of fuel and power resources in the amount of 250 million tons of u.t. [standard fuel equivalent]. For the first time in the country a firm has developed an analytical illustrated catalog, "Energy-Saving Technologies in the USSR and Abroad," which lays out in a systematic order more than 400 progressive energy-saving technologies that do not

require large capital investment for their use in production. The one-time introduction alone of each of these technologies will enable a saving in fuel and power resources of about 80 million tons of standard fuel equivalent.

However, a radical restructuring of the structure itself of industrial production, primarily in machinebuilding, with the wide application of the newest and least energy-intensive technological processes, should be a decisive factor in cutting fuel and electricity requirements for production needs.

The use of nontraditional energy sources—geothermal water and solar and wind power—must be taken up more earnestly. Work is proceeding extremely slowly in this area, at a time when Western countries are actively using the indicated types of energy and have achieved no few results in saving fuel and improving the ecological situation.

A most important national economic task is that of intensifying oil refining in order to increase the output of white oils and other petroleum product. One must no longer be reconciled with the fact that the output of petroleum product from refining crude in the USSR is only 63 percent, while in Western countries it reaches 85 percent. In an era of falling recovery of crude, this problem is becoming especially important. The USSR has at its disposal all the technological processes necessary for solving it. This problem was the subject of a special discussion at an expanded session of the Technical Council of USSR Minneftekhimprom [Ministry of Oil Refining and the Petrochemical Industry] that convened in July 1990. Meeting the national economy's growing requirements for petroleum product by intensifying oil refining is more effective than increasing oil recovery and refining at the existing level of petroleum-product output. Along with the execution of measures for intensifying oil refining, the work of converting automotive transport to compressed and liquefied gas must be strengthened. At present, 320 gas filling stations have been built in the country, and about 350,000 motor vehicles are operating on gas. However, the planned program for converting motor vehicles from liquid motor fuel to gas is not being carried out satisfactorily.

As for the oil-recovery branch, the attitude toward the problem of increasing formation productivity, especially in the modern era, when oil recovery is falling greatly, must be changed radically.

Questions arise. Why does the country use the oil riches from the ground so poorly, getting out only 40 percent of the crude, and no more than 6-15 percent at fields with viscous crude? Why, for example, has about one billion tons of crude, or only 38 percent of it, been taken from the grounds of the Apsheron Peninsula in 100 years, and why is it planned to get about 200 million tons more and to "bury" the remaining 1.6 billion tons? Is it possible

that more radical means for increasing formation productivity and for meeting the country's rising needs for petroleum product cannot be found?

Much work undoubtedly has been done in the field of increasing formation productivity. Oilfield workers have developed a number of progressive technologies: perimeter and center-to-edge waterflooding, thermal methods, physico-chemical methods, hydrofracturing, and so on. Their use enabled the crude-removal factor to reach 46 percent, and then, because of the introduction of new fields with viscous and highly viscous crudes into development, this indicator dropped to 40 percent. Meanwhile and in so doing, the crude-recovery factor is higher in the USSR than in the U.S. and certain other oil-producing countries. However, what has been pointed out should not be reassuring, and new methods for increasing formation productivity must be sought. Such methods exist and I would like to dwell on them. It was a recent stay on Sakhalin Island and in Norway, at Far North oilfields, that persuaded the author to set forth his point of view on this question. In June 1990 the Bureau of the Scientific Council of the USSR Academy of Sciences held a field meeting at Khabarovsk on the problem of supporting the Far East with fuel-and-power resources. The Far East is now going through major difficulties in its supply of fuel and electricity, especially petroleum product and gas. In 1990 the recovery of oil and gas in this region (on Sakhalin Island) was, respectively, 1.8 million tons and 2.2 billion m<sup>3</sup>. Sakhalin crude's share in total consumption of liquid fuel in the Far East during the 13th Five-Year Plan was cut from 13 percent to 10. Each year 18 million tons of crude and petroleum product are imported here, and transport expenses for importation of this fuel exceeds 350 million rubles. About 40 percent of the rolling stock of the Far East and Transbaykal Railroads is engaged in hauling fuel. All this persuaded the author to visit Sakhalin and get acquainted with the prospects for developing the oil and gas industry in this region.

Having becoming acquainted in detail with the work of PO Sakhalinmorneft [Sakhalin Offshore Oil Production Association] and the promising development of this region, the author came to the firm conclusion that Sakhalin Island and its shelf can and should provide completely the Far East's rising needs for oil and gas. At the start of 1990, seven oil and gas fields had been opened up on the Sakhalin shelf, and more than 100 structures, 19 of which have been prepared for deep drilling, were discovered by offshore geophysical methods. The Sakhalin shelf area, whose total area is about 20,000 km<sup>2</sup>, is the offshore area of the Far East that has been most studied and is most promising for oil and gas.

Because of a depletion of hydrocarbon reserves in the island's continental area, a further increase in oil and gas recovery in the Sakhalin area is possible mainly by bringing fields on the continental shelf into development, although the dry-land potential of Sakhalin still

has not been exhausted. However, there are great difficulties in mastering Sakhalin's shelf. The region's hydrometeorological situation from October through June is marked by the existence of ice cover, frequent storms, strong winds that change direction, and low air temperature, which require that the fields be developed with the construction of stationary offshore platforms that are ice resistant, as well as underwater service lines that are protected from the action of ice-hummock formations. The question inevitably comes up of then, by what means, and with what engineering solutions will we start to develop the seven oil and gas fields that have been discovered? Eight years have now passed since discovery of the first field and there are still no specific routes for solving them, although USSR Minneftegazprom [Ministry of the Petroleum and Gas Industry] has worked out a feasibility study for conquering the first two discovered fields and has held talks with the Japanese firm Sodeko (these fields were discovered with its participation) about involving it in their development. Unfortunately, there is no final decision yet.

In solving the problem of mastering offshore fields, especially on the Sakhalin shelf, introduction of all new domestic and foreign engineering solutions that increase the effectiveness of developing these fields should be called for. It is very important to find such solutions so that high efficiency may be achieved in mastering the discovered offshore fields with a minimum number of offshore platforms, especially the ice-resistant models, and of the wells that should be drilled from these platforms.

The fact is that just one ice-resistant offshore platform designed for drilling 20-30 wells costs no less than R400-500 million. Because of this, a reduction in the number of wells by drilling horizontal and horizontally branched holes is the most efficient solution for developing oilfields, especially offshore fields. The drilling of such wells will enable oil formations to be drained better and their production rate to be increased severalfold over the drilling of vertical holes. The author was convinced of this after visiting one of the fields in the Far North (the Norwegian shelf). A horizontal well drilled here with a penetration of 400 meters along the formation yields 4,000 tons of crude per day, while ordinary vertical wells have flow rates of 800-1,000 tons per day. A combining of horizontal well drilling with thermal and physical-chemistry methods, hydraulic fracturing, and other technologies will provide for high formation productivity. Unfortunately, despite the promise of developing oilfields by means of horizontal and horizontally branched wells, work in this area is advancing slowly. In December 1986, and then in September 1989, USSR Minneftegazprom developed and approved Gorizont, a comprehensive program that called for the creation of basically new systems for developing oilfields by means of horizontal and horizontally-branched wells and the wide-scale introduction of them in 1989-1995. Unfortunately, the program is being carried out extremely unsatisfactorily because of poor organization of the work and

insufficient financing thereof. After having become acquainted in detail with the state of affairs in this area and after considering the fragmentation of the work among a large number of organizations engaged with this problem, I would suggest that it is desirable to look at the question of creating a science-and-production enterprise based upon the organizations employed in the indicated work. The necessary financial and material resources should be allocated to this enterprise for this specific purpose. It is also desirable to involve the American firm Eastman Christensen, which has great experience in drilling such wells, and France's leading oil company, Elf Akiten, which is engaged in particular in automated offshore oil recovery and in horizontal and cluster drilling, in solving problems involved in introducing horizontal drilling.

Of course, before introducing horizontal drilling at the offshore fields, it must be perfected at continental fields, specifically at PO Saratovneftegaz [Saratov Oil and Gas Production Association] and PO Bashneft [Bashkir Oil Production Association], where about 10 horizontal wells, which penetrated 150-750 meters along the formation, had been drilled in 1986-1989. Horizontal and horizontally-branched drilling should be a powerful means for increasing formation productivity at both new and old fields, many of which have been written off as "exhausted," although they still contain at least half of the geological oil reserves. The holes of written-off wells through which horizontal holes can be drilled along the oil formation should, where possible, be used at the "exhausted" fields with a view to saving material and financial resources.

Something should be said especially about the use of horizontal drilling in developing high-viscosity fields. As has been indicated, the depletion factor does not exceed 6-15 percent when developing high-viscosity oilfields. Existing oil reserves will be practically dead without the use of special methods for developing and creating an appropriate mechanism for executing them. Of all the new methods for increasing formation productivity of viscous and highly viscous oilfields, the methods best developed technically and technologically are thermal methods, which enable the oil-recovery factor to be brought up to 55-65 percent, something that cannot be achieved by any other methods. According to PO Soyuztermneft [All-Union Science and Production Association for the Thermal Recovery of Oil] data, 17 technologies for various physical-geology conditions have been created on the basis of which operating schemes with a coverage of three billion tons of oil reserves have now been created and tested. Five more improved technologies are still being tested. At present thermal methods are being introduced at 49 facilities (at 281 in the U.S.). Oil recovery has risen from 0.5 million tons in 1981 to three million tons in 1989 (from 14 to 36 million tons in the U.S.). Thermal methods are being executed directly at oilfield sections with reserves of 150-200 million tons, or, in all, 25 percent of the viscous and highly viscous oil reserves (19 percent in the U.S.) are being stimulated by

this method. At present, the work on introducing thermal methods does not meet the necessary requirements for implementing the new technologies, despite the fact that three billion tons of viscous and highly viscous oil reserves can be covered with the operating schemes that have been developed and with operating equipment that is being produced. Experience shows that thermal methods can be implemented on a wide scale only with a specialized integrated organization with appropriate government privileges. Thus, in the U.S., in order to solve problems of recovering the indicated oil, the government compensates for up to 80 percent of the costs from the budget and reduces the tax on the profit. The necessity for wide-scale work to recover this oil is dictated by the country's need for motor fuels, Arctic oils, paints, varnishes, and, especially, rare metals, which the heavy crudes contain in high concentrations. Highly-viscous oil can be a reliable raw-materials base for obtaining vanadium, the shortage of which during 13th Five-Year Plan was about 50,000 tons. At the same time, the slow pace of the industrial introduction of operating methods for recovering highly viscous crudes and bitumen is explained by the fact that existing prices for oil and petroleum product make recovery of the oil itself and high-severity refining thereof (basically according to the mazut scheme at present) unprofitable under the existing economic mechanisms because of the complicated technology for developing such measures and the higher capital investment. Under the market economy, PO Soyuztermneft has made a proposal to USSR Minneftegazprom about organizing a concern, Termneftebitum, for recovering highly viscous crudes and bitumens and for high-severity refining of them, with sale of the refined product on both the domestic and foreign markets. The concern will be charged with the comprehensive task of creating mutually related technologies which will combine recovery and refining of the crude into one production-technology chain. In so doing, nature-conservation measures and ecological cleanliness of the processes under a waste-free technological cycle are to be provided. Proposals for organizing the concern call for the government to grant economic privileges for the profitable development of these fields, which are so complicated in structure and require the use of expensive technologies and equipment.

In the near term the main raw-materials base for the Termneftebitum concern will be created from six fields (Karazhanbas, Severnye Buzuchi, Van-Yeganskoye, Russkoye, Usinskoye and Zybza-Glubokiy Yar). With the adoption of a solution for creating the concern and with the extension to it of the necessary assistance, recovery of this crude can reach 53 million tons in the 13th Five-Year Plan, 113 million tons in the 14th. In this case, according to existing calculations, the wholesale price for one ton of crude will be, respectively, R85 and R100, and the possible price on the foreign market will be \$100-130 (U.S.).

Undoubtedly, creation of the Termneftebitum concern will enable organization and control of the work to be

improved during the recovery of heavy crudes, and its operation will bring the state great benefit.

It should be noted that all measures should now be taken to see to it that the solution of this problem is raised to the appropriate level, without affecting other methods for increasing formation productivity of both viscous and light crudes. We should take a major step in this area.

**COPYRIGHT:** Izdatelstvo "Nedra", "Neftyanoye Khozyaystvo", 1991

### Natural Gas Field Discovered Near Murmansk

*LDI905094291 Moscow All-Union Radio Mayak Network in Russian 0800 GMT 19 May 91*

[Text] It looks like Transarctic Murmansk is to become the center of a large base for our natural gas extracting industry. Such a prospect is connected with a project to develop the Shtokmanov deposit discovered on the shelf of the Barents Sea. The reserves of the fuel are sufficient to satisfy the demands of the USSR and many Western countries for many years.

According to preliminary information, the exploitation of the deposit may begin in the near future. Generally speaking, the shelf is our future—besides gas and oil there is also gold and tin there. The question is only in transportation and the severe climate.

### ELECTRIC POWER GENERATION

#### Officials Counter Claims of Chernobyl Reactor Containment Dangers

*9IWNO4664 Moscow GLASNOST in Russian No 18, 1 May 91 p 6*

[Interview with Yu. M. Cherkashov, chief designer of pressure tube reactors from the Scientific Research Institute for Power Technology, and V. F. Shikalov, chief of the Laboratory for Automatic Control Systems of Nuclear Power Stations from the Academy Institute of Nuclear Power imeni Kurchatov, by V. Starostin: "But How in Reality: The Chernobyl Sarcophagus: Trial by Rumors"; first paragraph is GLASNOST introduction]

[Text] It looks as if the durability tests of the Chernobyl sarcophagus are continuing. . . At first it was tested by the four-point earthquake—an echo of the well-known Carpathian shocks, but now, on the occasion of the sad anniversary of the accident at the nuclear power station, by some of the mass media that have spread rumors about the unreliability of the sarcophagus.

[Starostin] Thus, the German newspaper BERLINER ZEITUNG, with a reference to the deputy chief of the technical department of the Chernobyl Nuclear Power Station, V. Gruzdev, greatly frightened its readers with the news that the processes taking place inside the sarcophagus are fraught with new ejections of radioactive substances into the atmosphere. The 1,100-ton "lid" covering the reactor at which, five years ago, the accident took place, supposedly tilted by 15 degrees. If it is

destroyed, the newspaper writes, there will be a terrible catastrophe. In this case, first of all the people who continue to work at the nuclear power station will suffer, but, given the requisite strength and direction of the wind, regions that have in the meantime not been touched by it will be subjected to radioactive contamination.

This assertion has been interpreted in all ways by other mass media, true, already without reference to V. Gruzdev, since none of the scientists, specialists and journalists involved with the sarcophagus are familiar with his name. The official duties of the deputy department chief of the nuclear power station do not directly include either the sarcophagus or, even more so, prognosticative assessments of its conditions. For this reason, we shall leave to the conscience of V. Gruzdev, if he, of course, actually did speak on this subject with a Western correspondent, such critical statements and listen to people who are competent in this question: the chief designer of pressure tube reactors from the Scientific Research Institute for Power Technology, Yu. M. Cherkashov, and the chief of the Laboratory for Automatic Control Systems for Nuclear Power Stations from the Academy Institute of Nuclear Power imeni Kurchatov, V. F. Shikalov.

According to Yu. M. Cherkashov, the metal construction of the upper biological shielding—and this was precisely what was at issue in the German newspaper—is in the same condition in which it was on 26 April 1986 and there are no movements taking place in the scheme. This is indicated by laser observations, stability characteristics, and other data. Not even the four-point earthquake influenced the metal construction—after the disaster it stands like a rib to the reactor, having been reliably fixed in the concrete foundation.

The problems connected with the further fate of the sarcophagus were discussed in detail at a scientific-technical council, and journalists were also briefed about them during a visit to the nuclear power station. The policy of openness of Soviet scientists and specialists finds complete understanding, although, as Cherkashov believes, from time to time there also appear publications that are extremely far from the truth. Concretely, the problem lies in taking the best technical decision. For the time being, there are two proposals. The first, to install in this place a burial ground, having put away the destroyed reactor in concrete for centuries. The second—continuing the work on increasing the reliability of the sarcophagus, to go after effective and safe technology, which will make it possible to dispose of it in time.

Now we shall listen to V. F. Shikalov. The interest of journalists in the sarcophagus and everything connected with it, in his view, is legitimate and understandable. What is not understandable is only how and why such misinformation is appearing in serious newspapers. Indeed, the lobby interviews of incompetent people

should not be passed out as facts, all the more so when the question concerns Chernobyl.

Our laboratory, Shikalov says, carries out the diagnosis and monitoring of the condition of the unit involved in the accident and coordinates scientific research and other work connected with the sarcophagus. It would be irresponsible to give a 100-percent safety guarantee even for the decade ahead, but I can assure the readers of the newspaper that its present condition is stable and is no cause for alarm.

### Officials View Armenian Power Generation, Ecological Requirements

91WNO466B Yerevan GOLOS ARMENII in Russian  
10 Apr 91 pp 1-2

[Article by G. Santuryan, director of the Razdanskaya State Regional Electric Power Plant, distinguished engineer of Armenia, honored power engineering specialist of the USSR, and P. Kyalyan, chief of the Scientific Research Department of Power Engineering of the Yerevan Polytechnical Institute, candidate of technical sciences: "All About Ecology: Continuation of the Discussion"]

[Text] To demonstrate the necessity of a continuous increase in the production of electric power in the republic does not fall within our task. We will simply recall that in Armenia, a republic with developed industry, per capita production of electric power is greatly inferior to that of many countries in the world. To talk seriously about the fact that someone is obligated to produce something at home and turn it over to us is a subject for the average person. As well as about the replacement of the large power industry through nontraditional sources of electric power in the foreseeable future. Along with this, the worshippers of pure power engineering intentionally or out of ignorance do not talk about the possible and necessary capacities, the ecological sins, and the high unit cost of the proposed installations. But, you know, the time has come to learn to count not only the money in one's own pocket. Reality consists of the fact that one can survive, if everyone, following the example of the developed countries, having rolled up one's sleeves, will begin to put things in order at home, in spite of the barriers and overcoming the enormous difficulties that arise in any undertaking.

The thermal electric power station with a capacity of 800 megawatts, located in the center of Berlin, may serve as an example for imitation. The station uses city waste and coal as fuel. Along with electric power, heat is produced for heating, as well as cement, gypsum, and scrap metal. And it would not occur to any of the Berliners to calculate the quantity of the burnt oxygen since the station, in supplying the needs of industry and the population, observes within perceptibly reasonable limits the demands of ecological cleanliness. And there are many such examples.

Thermal electric power stations (TES) are the basic source of electric power at the present time in all countries of the world. Armenia is no exception. The largest TES in the republic is the Razdanskaya TES with an installed capacity of 1,110 megawatts. Proceeding from the obsolescence and wear of the equipment being used, as well as the increase in the reliability of the power supply to the republic's consumers, an expansion of the station is being carried out through the installation of four modern power-generating units with a capacity of 300 megawatts each, having a greater efficiency factor and a low unit fuel expenditure—330 grams per kilowatt hour instead of the 360 grams per kilowatt hour that are being burned at the present time in the power-generating units being used at the station. Unfortunately, the first power-generating unit already now cannot be put into operation before 1992. The fourth—according to the most optimistic prognoses—in 1995. Although it is well known that any state flourishes economically and the reliability of electric power supply increases sharply when the growth of electric power station capacities outpaces the growth of the used capacities of industry.

Fuel and water are the basic raw material for the production of electric power in a TES. The reduction of the unit expenditure of their consumption is an important task of the power engineers, which is also aimed at the decrease of the ecological harm inflicted on the environment. Natural gas—the cleanest in ecological respects—is envisaged as the basic type of fuel (90 percent) utilized at the Razdanskaya State Regional Electric Power Station. As a reserve, during a pipeline accident—mazut (10 percent). The justification of the necessity of using natural gas as the basic type of fuel in the TES of the republic is an important ecological achievement of the power engineers of Armenia. Low-calory types of fuel are generally accepted throughout the world for burning in TES: Brown coal, shale, peat, and even city garbage, which, along with harmful emissions into the atmosphere, produce a large quantity of ash and other waste materials.

To raise the reliability of the output of electric power and to reduce the dependence on the whims of the "neighbors," networks of above-ground and underground capacities for the storage of fuel have been installed in the TES of Armenia and are being continuously expanded. They exist in all stations of the world and are highly necessary to Armenia, which in terms of its geographic location is especially subject to apolitically-motivated blockade. Fuel can be accumulated and used during difficult moments, which is for the time being impossible with electric energy.

The second type of raw material—water—is also in extremely short supply for our republic. For the Razdanskaya State Regional Electric Power Station, everything necessary is being done to reduce the expenditure of water through the use of closed cycles. Thus, for the cooling of the steam wasted in the turbine, Geller's ecologically clean "dry" water cooling towers have been introduced at the station and are being used for the first

time in the country. For comparison, it may be noted that "wet" water cooling towers, set up in analogous power-generating units of the Armenian Nuclear Power Station with a capacity of 200 megawatts, "evaporated" about 40 tons of water an hour, which required continuous replenishment, and the clouds of steam over the water cooling towers were visible from afar. Geller's water cooling towers are envisaged also for the 300-megawatt capacity power-generating units that are being newly installed and are at the present time being assembled in cooperation with Hungarian specialists.

One of the basic indicators that also characterize the ecological cleanliness of thermal power stations is the magnitude of the unit expenditure of electric power for their own needs. The reduction of this indicator leads to the decrease in the unit expenditure of fuel during the output of electric power and, in the final analysis, to the reduction of the quantity of emissions of flue gases into the atmosphere. The Razdanskaya State Regional Electric Power Station has attained appreciable successes in this direction and occupies one of the first places in the USSR Ministry of Power and Electrification.

During a 24-hour period, the quantity of electric power needed by consumers changes. In the 24-hour load schedule of the electric power system, "peaks" and "off-peaks" develop. Usually, in order to cover the irregularities of the 24-hour load schedule, hydroelectric stations with a daily run-off pond are involved. This is the optimal variant. The Armenian energy system is deprived of this possibility. The hydroelectric power stations that exist in the republic, unique in the engineering they embody, operate in the routine of only optimal use of water flow for irrigation needs, which in the course of following to its place of destination, produces incidentally also electric power. The Yerevan and Kirovanskaya heat and electric power stations are the basic sources of heat and operate in the mode of producing steam that is being used by industry.

Nuclear power stations do not allow changes in the output of electric power and in all energy systems operate with an unchanged load in the base of the 24-hour schedule.

Thus, the Razdanskaya State Regional Electric Power Station is the only possible regulation station of the 24-hour load schedule of the Armenian energy system. For the TES equipment, this is an unhealthy and, in technical-economic respect, inexpedient routine. A change in the load of a power-generating unit requires changes in the productivity of powerful mechanisms for its own needs—the feed pumps which feed water into the boiler, blow fans which supply the furnace with the necessary amount of air, and smoke exhausters which remove the combustion products. The regular means being utilized now, which have good characteristics in the case of small changes of expenditures, become extremely uneconomical with the increase of the depth of regulation. The search for means directed toward raising the efficiency of regulation is an urgent task

confronting the power engineers in all countries of the world. Research along this line is being conducted at the Razdanskaya State Regional Electric Power Station jointly with the Yerevan Polytechnical Institute. Positive results have been achieved, which make it possible to increase the efficiency of the mechanisms through a change in the speed of rotation. The results of the scientific research work have been brought to the stage of industrial introduction. The station has already received the ordered electrical equipment. By order of the USSR Ministry of Power and Electrification, the Razdanskaya State Regional Electric Power Station has been designated as the main organization for the development of the powerful alternating current controlled-velocity electric drives. According to the data of the technical-economic calculations carried out by the Rostov department of the Atomteploproekt Institute, the introduction of controlled-velocity electric drives of the type ETVA-5000/6 on the feeding pump and PChD2-500-500-12.5 on the blow fan and the smoke exhauster of one power-generating unit with a capacity of 200 megawatts will make it possible, during a year of operation, to achieve an economy in electric power on the order of 10.7 million kilowatt hours. At a unit expenditure of 360 grams per kilowatt hour for its production, 3,850 tons of equivalent fuel are necessary. For the sake of clarity—this is 77 railway cars of 50 tons each. On the economized fuel, a power-generating unit with a nominal load of 200 megawatts can operate for 53.5 hours. The profit in a year comes to R208,700, not taking into account improvements in ecology from the reduction of emissions and pollution of the environment. During the summer period, they were forced to reduce the load of the power-generating unit to the technical minimum possible—120 megawatts, which is attended by great losses for its own needs. It becomes necessary to shut down the power-generating unit. However, this leads to the additional expenditure of fuel for the heating of the power-generating unit during the start, as well as to the acceleration of the aging of the furnace, boiler, and turbine metal, lowering the work life. The use of controlled-velocity electric drives will make it possible to increase the efficiency of operation during partial loads, to raise the maneuverability of the power-generating unit and to exclude the necessity of its shutdown.

The ecological indicators of the power industry in many respects depend on the level of consumption. Everyone loves to talk about the necessity of economy. To talk, but not to economize: "The economy must be economical." "A rich country, it will endure everything!" It did not endure. Every subscriber must firmly realize that a reasonable attitude to the use of electric power, both in production and daily life, is the basis of the ecological cleanliness of its production. The cutting of every kilowatt hour reduces on the average by 360 grams the quantity of fuel burned at the TES, and consequently of emissions into the atmosphere as well. By rights of the main enterprise for the development of controlled-velocity electric drives, we are turning to all enterprises operating powerful mechanisms: Pumps, ventilators, compressors

and smoke exhausters requiring changes in productivity. We are ready to extend direct assistance in the solution of the noted problems, share experience, render consultations, conduct research, develop recommendations, select necessary equipment, develop referencing schemes, and bring the obtained results to practical introduction.

We are firmly convinced that the Republic of Armenia will really attain economic assistance and practical independence if in the future, too, it will improve and develop the foundation of foundations—the power industry. The replacement of obsolete equipment, the introduction of new capacities and modern technologies not only at the TES, but also in all spheres of the industry, are an extremely necessary and urgent direction of activity. It is harmful to be fascinated by backwardness! It is impossible to improve the ecological state of the environment through bare demands, the closing of industrial enterprises, the replacement of the electric light by a kerosene lamp, and the electric drive—by cart traction.

#### Kola AES Exemplifies Benefits of Nuclear Power

914E00904 Moscow RABOCHAYA TRIBUNA  
in Russian 22 May 91 p 3

[Article by Natalya Kozlova: "Sunsets over Polyarnyye Zori": "On the Harm and Benefit from Nuclear and Other Energy Giants"]

[Text]

This happened in the winter. The local soviet of the settlement of Polyarnyye Zori made the decision on the construction of still another nuclear power station in addition to the one located in the vicinity. The decision may easily be called a sensation at the national level.

Following this extraordinary step, the session of the Murmansk Oblast Soviet of People's Deputies votes to appeal to the government of the country to build the Kola AES-2.

Strange deputies live beyond the Arctic Circle. We are all used to the fact that nuclear power stations are very bad.

A "mushroom" of incredible dimensions floats by under the wing of the airplane. From a distance it reminds one of an image from instructional films on civil defense. The trail from the stacks extends for many kilometers. Only the peaks of Khibin were above that. This is the Kirovskaya GRES [state regional electric power station] from the vantage point of a bird in flight. The view from the ground is even more depressing. Gray snow, a whitish sky.

The GRES has been providing power to people and machines for more than three decades now.

"Everything has been squeezed out of the Kirovskaya GRES," says its director Yuriy Petrovich Osipov wearily. "It is becoming harder and harder to live. Coal

reserves were enough for about 20 days. But the polar regions are the polar regions. God forbid that there should be a strike or accident."

Here the director fell silent. The pause can be filled with some figures that are frightening and not very well known: two kg of oxygen are required to burn one kg of coal. Essentially the Kirovskaya GRES works like a TES [thermal electric power station]. If it replaces even one block of the neighboring Kola AES [nuclear electric power station], then 720 tons of sulfur dioxide will be released into the air daily, and the carbon dioxide is expressed by a figure impossible for a normal person to imagine—45,000 tons a day!

But time is passing. And as it does, huge ash heaps are growing in Kirovsk and throughout the country. But not even this is the most terrible thing. The ash is radioactive, just as the coal itself is radioactive. True, the level of X-rays is not high. But they are not burned in the fire. They therefore accumulate in the ash in large and dangerous quantities. And it is not customary to talk about this.

There are many stations like the Kirovskaya GRES throughout the country. They do colossal damage to the water, air, poultry, and man. But we cannot live without power. More and more of it is required every year. According to the estimates of scientists, however, the proven reserves of oil and coal in the entire world are enough for 40 years and unproven reserves may last for another 80 years at best. This is the approximate time in which it will be necessary to shift to new sources of energy.

Such sources are being sought. They work with solar energy, the wind, and oceanic tides. But one kilowatt from a solar station costs up to 60 rubles. You cannot heat even a medium-sized city with power from the wind. There is also the "peaceful" atom, as we said even quite recently. But the situation with respect to it is as heated and confused as it can be.

Too frequently of late the arguments of those who are against nuclear power have been based on feelings and emotions. And its supporters are not behaving any better. Those who are "for" nuclear power stations make assertions that are only reassuring and not always well founded.

Meanwhile, we are receiving practically no reliable scientific information on radiation. Who, for example, knows that the usual radiation dose through cosmic irradiation in the cabin of an aircraft ranges from 500 to 600 microroentgens an hour? Thus, every year the passengers of Aeroflot receive a higher dose than the inhabitants of the wooded district suffering from Chernobyl.

There is an organization under the United Nations called the International Atomic Energy Agency. It commissioned several groups of experts in different countries with assessing the degree of risk in the production of electric power. They chose 7,500 working days as one

unit of risk. To put it another way, this is the duration of work of one person over 30 years. The probability of his death because of an accident gave a degree of risk equal to 1. All of the groups of experts showed approximately the same results: in the production of electric power for a city of one million during one year, the degree of risk for a nuclear electric power station is 1.5; it is 5 for a hydroelectrical power station; 60 for a solar electric power plant; 70 for a power plant using wind power; 200 for a power plant using oil; and 250 for a coal-fired power plant. This alone shows convincingly that if it were possible the construction of plants using coal and oil should be stopped immediately.

Who doubts that radiation is indeed a deadly danger? But it turns out that the sources of radiation most deadly for people are not at all those that are talked about the most. We receive the highest dose from natural sources of radiation. Radiation linked with the development of nuclear power accounts for only a small share of it. People get much higher doses from other forms of our activities on earth. I have in mind, for example, X-rays in medicine, the burning of coal, and in particular permanent habitation of well-insulated premises. It is worth looking into the latter separately.

Only recently scientists came to understand that the most significant of all natural sources of radiation is the invisible, tasteless, and odorless gas radon. It is seven and half times heavier than air and is released from the earth's crust everywhere. We inhale it along with the air. But as paradoxical as it may seem, man receives the largest dose of irradiation from radon in a closed and unventilated space. In zones with a temperate climate, the concentration of radon in closed places is approximately eight times higher than in the air! Radon collects in the air inside premises only when they are well insulated. It seeps in through the foundation, through an earthen floor, or from the building materials of the house.

This information is not intended to frighten the reader. You must agree that if something is to be really feared, it is necessary to know about it.

According to the UN Scientific Committee on the Effects of Nuclear Radiation, the relationship of sources of radiation will appear as follows: natural sources 2, sources used in medicine 0.4, radioactive fall-out 0.02, and nuclear power 0.001.

There is nothing sensational about anything that has been said. Those who need to know about this do know. But why are they keeping silent?

As seen by a visitor, life in the settlement of Polyarnyye Zori is amazing. The Kola AES gave life to it. Here the houses are uncommonly brightly colored and the forest is untouched by builders. The sky is a deep blue. I would characterize the moral atmosphere of the settlement as follows: there is no feeling of electricity in the air. There are no crowds in the local stores, although the choice is not the greatest. Most products are sold with coupons.

To be sure, I think that a housewife from Moscow would suffer a stroke if you let her see the cooking at the AES.

They say that during the northern summer they gather mushrooms and berries in immense quantities here. The fishing is excellent at Lake Imandra, the largest lake in northern Europe, and there is a wonderful Alpine ski trail. All of this produced the portrait of a city where people live well.

The pieces of the image of a quiet oasis beyond the Arctic Circle crashed to the carpet in the office of Nikolay Zhevnerov, chairman of the Polyarnyye Zori Soviet. It turned out that 95 percent of the products here are brought in from elsewhere. The situation with respect to meat coupons is not good. More accurately, there are coupons but there is no meat.

In general, the problems here are the usual ones that exist everywhere. But not everywhere does a nuclear power station operate right next door. It turned out that Nikolay Ivanovich is not at all concerned about this close proximity:

"They are demanding the closing of the nuclear power stations out of ignorance. Yes, initially there was some tension in the neighboring regions. The information service came to the rescue. After all, most people know nothing about the atom and fear things that are not frightening at all."

We will assume that the atomic workers are people with an interest. I am not going to present their opinion that it is possible and normal to live and work near a nuclear power station, although this occupation has experienced its ups and down in its short history. It began with a romantic aureole and a touch of secrecy. Then came Chernobyl. In the schools, the children of atomic workers had explained to them the harmfulness of their parents' occupation. From heroes in the opinion of ordinary people, they became almost enemies of the people. No one is in a hurry to take an objective look at the situation.

And here, so to speak, is the other side of the coin. Imagine the following picture.

The surface of the water is steaming, enveloping the guard rails of the breeding tanks with a thick coat of frost. The trout are feeding. The appearance of the section foreman Anna Khirkovskaya causes a real storm in each breeding tank. The surface of the water boils from the dark backs of the fish.

There is nothing surprising at this farm. It is just that it is next to the Kola AES and the heated water also comes from there. This production association is called Murmanskrybprom. Last year they raised 215 tons of fish here. Under this year's plan, it is supposed to be 250. It seemed to me that the workers here have no direct connection with the AES. Their point of view toward such a neighbor must be impartial.

"It is not frightful here," thinks Kirovskaya. "Everywhere there is more contamination than here."

Her family lives in Polyarnyye Zori. And do you know what the section foreman is dreaming about?

"They ought to build a third phase at the AES, then we would raise carp. We could feed the entire oblast with fish."

She is right about it being clean here. An organization independent of the AES monitors the contamination.

The greenhouse combine of Polyarnyye Zori Sovkhoz is in its fifth year. It is also heated by the nuclear power station. Greens and vegetables, onions and tomatoes grow in an area of 30,000 square meters. Produce is going to the tables of the inhabitants of the oblast. Brigade leader and agronomist A. Udalov vouches for the safety of everything that is grown. He speaks the truth: independent inspectors never once found a "crime."

By the way, the situation that has developed at the Kola AES and around it is essentially no different from that in the West. There are many more nuclear reactors operating in large countries than here. And there are protests. On the whole, whoever, the morale is much better.

The director of the Kola AES, V.A. Shmidt, is certain that within two years the pendulum of public opinion will shift abruptly in the other direction. It will go from complete rejection of nuclear power to demands for its construction—and quickly! Which he very much fears, by the way. He fears that it might become the next campaign.

Least of all do I want the atom to appear as a zone without problems. They do exist. And they require the most serious attention. Neither the supporters nor the opponents of nuclear power plants will be able to put off such a discussion. The situation in the country's energy balance has become extremely acute.

## CONSERVATION EFFORTS

### Fuel Conservation Program Faulted

914E00964 Moscow EKONOMIKA I ZHIZN  
in Russian No 12, Mar 91 p 10

[Article by D. Shabanov, deputy chief of the heavy industry section of the USSR People's Control Committee, and V. Grishin, deputy chief of the power engineering and electrification section of the USSR People's Control Committee, under the rubric "On the Road to the Market"; "The Government Program To Save Fuel and Energy Resources Is Laid Up in a Paper Backwater"]

[Text] How much was said and written, particularly just before the last five-year plan, about the need to ascend to dizzying heights in the matter of saving fuel and energy! The USSR energy program was to have been a decisive

step: compared to 1985 it was planned, for example, to increase savings of fossil fuels by 200 million to 230 million tons. However, the five-year plan ended and, alas, there was still a great distance left to those heights. To be candid, fulfillment of these tasks is moving at a snail's pace. Things are especially bad with respect to saving fuel at the thermal power stations of the USSR Ministry of Power and Electrification, which is the largest wholesale consumer of solid, liquid, and gas fuels.

An expert who had worked for a long time at a thermal power station and who for some reason found himself back at such an enterprise after a three-year interval would be shocked. It is difficult to believe that the many-year tradition of a thrifty attitude toward the consumption of fuel and the products made from it, nurtured by so many generations of our power engineers, could have been lost in so short a time. The personal economy accounts and the bonuses awarded to workers for specific improvements in primarily technical-economic indicators for operating equipment and for set points for reducing fuel consumption to produce output have been tossed into oblivion. What are the reasons for such deplorable changes?

Analysis reveals a quite unexpected truth. The reason is the protective reaction of the Ministry of Power and Electrification to the growing economic problems.

It is no secret that in recent years the sector has been the target of major criticism. And there is justification for this. During the years of the last five-year plan half of the plans for construction in power engineering were not fulfilled. Retooling of electric power stations, one-fourth of which have reached their maximum age and cannot provide reliable energy supplies, is being delayed. The major hopes placed in nuclear power engineering were dashed by the Chernobyl accident. As a result, in a number of regions the situation regarding energy supplies for the national economy and for domestic needs is critical.

It is understandable that the direct road to changing the situation is to bring into maximum play and in every possible way the capacities available at the power stations. But, as in any work, quantitative growth often acts in opposition to quality indicators. Optimal operating conditions do not always match maximum load. But the main factor is that the task of careful consumption of fuel in this case becomes difficult to achieve. For in order to make economies it is necessary to carry out prompt and good-quality repairs on equipment, and that means shutting it down and reducing output.

And the ministry has moved to support quantitative indicators at the expense of qualitative indicators.

Nor has the situation improved under the conditions of the transfer of enterprises and organizations of the USSR Ministry of Power and Electrification to full cost accounting and self-financing. In the system adopted, the decisive role should be played by norms that make it possible to take into account the effect of various factors

that sometimes do not depend on the efforts of the collective. Practice has shown, however, that these norms have turned out to be ineffective. Why? For thick sets of normative figures and characteristics of equipment have been produced, and at each power station at least two engineering-technical workers are now employed to do the laborious calculations of the norms.

However, only people far removed from this business could expect the economic mechanism to operate effectively on the basis of an imperfect norm-setting system for specific fuel consumption.

For serious distortions start right at the beginning of the process of determining norm magnitudes. Particularly large inaccuracies are associated with the fact that because of the lack of adequate computer equipment, norms are not calculated on a continuous basis but according to indicators averaged over a month. The significant flaw in the existing methodology used for norm-setting is that its possibilities are limited in evaluating the effectiveness of a particular main direction in the work to save fuel, namely, optimizing the spread of the electrical and heat load between units.

The ministry has added its own home-made defects to the objective defects of the norm-setting system. For reasons that are not understood, limits have been introduced on fuel savings, and the calculations for this are done in a very, very arbitrary way. Particular harm was done to norm-setting several years ago when the power characteristics of equipment were reviewed. The department was unable to resist the tempting and notorious leveling, and it decided to introduce a so-called reserve saving and initiate accountability in the operation of all power stations in terms of fuel economies, from the existing level. Thus, the great work of the best collectives in bringing order to fuel consumption was nullified.

Take, for example, the heat and electric power station [TETs] at the Volzhskiy Automobile Plant [VAZ], where equipment is operated at a sufficiently high level. According to the calculations, in order to achieve nominal indicators the enterprise is reducing specific fuel consumption by two percent. But it was precisely the last difficult steps that were taken as the source for paying bonuses to personnel for fuel economies. At the same time, for the neighboring Tolyatti TETs and the Novokuybyshev TETs, where this work was started up, the reserve saving was six percent and eight percent respectively. These two lagging enterprises were able to meet these easy norms even if they used more than 130,000 tons of fuel too much every year, and to receive incentive funds for so doing.

Great confusion has been introduced not only into the calculation of norms but also into the actual calculations of fuel consumption, particularly in connection with today's unsatisfactory conditions of measuring instruments. Thus, the residue of coal on barges making deliveries to the Tripolskiy state regional power station [GRES] is measured to an accuracy of no better than five

percent. But the entire savings for 1989 at the power station amounted to 0.1 percent of the fuel used, that is, it was 50 times less than the error. So you work out whether this coal was saved by personnel at the station or whether it should be attributed to the carelessness of the worker who carried the coal down the Dnepr when the water was choppy.

No consideration has been given to an incentive system for high quality repair work in the sector; this has always been the main source of fuel economies. As a result, in 1989 almost 60 percent of the units undergoing major and medium repairs had indicators lower than the norm, and sometimes this was the case even before they were repaired. And many enterprises have altogether forgotten about the periodic current repairs essential for maintaining equipment in a normal condition.

It is obvious that additional sources are also needed to provide incentive for economies. The government has twice entrusted the USSR Gosplan [State Planning Committee] with the task of drawing up the corresponding documents. Similar tasks have been set for its own functional administrations and for the collegium of the USSR Ministry of Power and Electrification. However, there was no control over compliance with instructions and remiss workers have not been made accountable. As a result, good decisions have been laid up in a paper backwater.

It is most strange that during this crucial period there has been a decline in the work not only of those directly involved but also in the organs designed to monitor their work.

This relates first and foremost to the Interdepartmental Commission on Economies and the Rational Use of Material Resources, set up under the USSR State Committee for Material and Technical Supply. It has virtually cut itself off from this work. During the past three years the situation with respect to fuel economies in the system of the USSR Ministry of Power and Electrification has not been reviewed.

Sensing the passiveness of the center, the territorial organs of the State Committee for Material and Technical Supply have also stopped dealing with this. It was not possible to find any trace of their control activity.

We see that we need strict state control everywhere over the efficient use of fuel such as operates in most of the developed countries.

Analysis of major defects in fuel consumption at thermal power stations once again confirms the idea that has been brought up in a number of pieces published recently in EKONOMIKA I ZHIZN on the need to accelerate work on and pass a USSR law on saving energy. Only the rigid framework of such a law, along with highly scientific norms for fuel consumption, unsuitable for today's conditions, will force managers in the enterprises and in the sector to find practical operational methods to do the calculations and provide incentive for each worker to make a specific contribution in saving energy resources.

**USSR Law on Resolving Individual Labor Disputes**

914A0763A Moscow *IZVESTIYA* in Russian  
18 May 91 Union Edition p 4

[Text of USSR law, issued by USSR President M. Gorbachev: "On Procedures for Resolving Individual Labor Disputes"]

[Text] Moscow, the Kremlin, 11 Mar [May?]—For the purposes of extending legal protection for citizens' labor rights and eliminating categories of workers whose labor disputes are examined in a subordination procedure, the Supreme Soviet of the Union of Soviet Socialist Republics resolves:

**I. General Provisions**

**Article 1.** The present law regulates the procedure for resolving individual labor disputes arising between individuals working on the basis of a labor contract (agreement) and the administration of the enterprise, institution, or organization (subdivision) over questions of application of legislative or other normative acts on labor, the collective contract and other labor agreements, as well as the establishment for the worker of new or altered working conditions. By the administration of the enterprise, institution, or organization (subdivision), the present law understands the organ on which, in accordance with legislation, the functions of operational administration of the enterprise, institution, or organization (subdivision) have been placed, regardless of their type, form of property, or management (the director and his deputy, the enterprise council, the administration, or other organs delegated the right to administer the enterprise, institution, or organization [subdivision]).

The procedure established by the present law for examining labor disputes does not extend to disputes over early dismissal from paid elective positions of workers in public organizations and other associations of citizens by decision of the organs that elected them.

The features of the examination of labor disputes by judges, procurators, their deputies and assistants, as well as investigators from the procurator's office over issues of dismissal, changes in the date and formulation of the cause for dismissal, transfer to another job, payment for time of enforced absence or for performing lower-paying work and imposing disciplinary penalties shall be established by legislative acts of the USSR.

**Article 2.** Labor disputes over issues of application of legislative and other normative acts on labor, the collective contract, and other labor agreements shall be examined:

1) by commissions on labor disputes;

2) by trade union committees of enterprises, institutions, and organizations (subdivisions). By trade union committees of enterprises, institutions, and organizations (subdivisions), the present law understands the organs of

trade union organizations of enterprises, institutions, and organizations (subdivisions);

3) by rayon (city) people's courts.

Labor disputes involving certain categories of workers over specific issues shall be examined by superior organs (third part of article 1, articles 28-35 of the present law).

Labor disputes on the establishment for the worker of new or altered working conditions shall be resolved by the administration of the enterprise, institution, or organization and the corresponding trade union committee within the bounds of the rights granted them.

**II. The Organization and Working Procedures of the Commission on Labor Disputes**

**Article 3.** The commission on labor disputes shall be elected by a general assembly (conference) of the labor collective of the enterprise, institution, or organization (subdivision) with the number of those working to be no less than 15 persons.

Elected to the commission shall be those individuals who have received a majority of votes and for whom more than half of those present at the general assembly (conference) have voted.

The election procedure and the number, makeup, and terms of the commission shall be determined by the general assembly (conference) of the labor collective of the enterprise, institution, or organization.

The commission on labor disputes shall choose from its number a chairman, his deputy, and a commission secretary.

**Article 4.** By decision of the general assembly (conference) of the labor collective of the enterprise, institution, or organization, commissions on labor disputes may be formed in subdivisions. These commissions shall be elected by the collectives of the subdivisions and shall function on the same bases as the commissions on labor disputes of enterprises, institutions, and organizations.

Subdivision commissions on labor disputes may examine labor disputes within the bounds of these subdivisions' authorities.

**Article 5.** The commission on labor disputes is the obligatory primary organ for examining labor disputes arising in the enterprises, institutions, and organizations (subdivisions), with the exception of disputes for which the present law and other legislative acts have established a different examination procedure.

A labor dispute is subject to examination by the commission on labor disputes if the worker, either independently or with the participation of the trade union organization representing his interests, has not settled the disagreement in direct negotiations with the administration of the enterprise, institution, or organization (subdivision).

**Article 6.** The worker may appeal to the commission on labor disputes within three months of the day he found out or should have found out about the violation of his right.

In the event that the established deadline is missed due to valid reasons, the commission on labor disputes may renew it and resolve the dispute in essence.

The petition of the worker who has appealed to the commission on labor disputes is subject to mandatory registration.

**Article 7.** The commission on labor disputes is obliged to examine a labor dispute within a ten-day period. The dispute shall be examined in the presence of the worker who has submitted the petition and a representative of the administration.

Examination of the dispute in the absence of the worker shall be permitted only with his written consent.

Should the worker not appear at the meeting of the commission, the examination of the petition shall be postponed. Should the worker fail to appear a second time without valid reasons, the commission may issue a decision to remove the given petition from examination, which does not deprive the worker of the right to resubmit his petition.

**Article 8.** A meeting of a commission on labor disputes shall be considered competent if no fewer than two thirds of its elected members are present.

The interested worker and the administration have the right to petition for the justified removal of any member of the commission. The issue of removal shall be decided by a majority of votes of the members of the commission present at the meeting.

At the meeting of the commission on labor disputes, minutes shall be taken and signed by the chairman or deputy chairman of the commission.

**Article 9.** The commission on labor disputes has the right to summon witnesses to a meeting and invite specialists and representatives of professional unions and other public organizations. At the commission's request, the administration of the enterprise, institution, or organization (subdivision) is obligated to present the necessary calculations and documents.

**Article 10.** The commission on labor disputes can reach a decision by a majority of votes of the members of the commission present at the meeting. The decision shall indicate: the designation of the enterprise, institution, or organization (subdivision); the last name, first name, and patronymic of the worker who has appealed to the commission; the date of appeal to the commission, the date of examination of the dispute, and the essence of the dispute; the last names of the commission members and representatives of the administration and trade union committee present at the meeting; the results of the voting and validation of the commission's decision.

Copies of the commission's decision shall be delivered to the worker and administration of the enterprise, institution, or organization (subdivision) within three days' time.

**Article 11.** A decision of the commission on labor disputes may be appealed by the interested worker or the administration at their choice either to the trade union committee of the enterprise, institution, or organization (subdivision), with the exception of those instances envisaged by the second and third parts of article 1, point 3 of article 21, and article 22 of the present law, or directly to the people's court within ten days' of the delivery to them of copies of the commission's decision. Missing the indicated deadline is not grounds for refusing to accept the petition. Having recognized the reasons for missing the deadline as valid, the trade union committee of the enterprise, institution, or organization (subdivision), as well as the people's court, may renew the deadline and examine the dispute in essence.

Should one of the parties to the dispute not in agreement with the decision of the commission on labor disputes appeal to the trade union committee and the other party to the court, it shall be decided by the court.

**Article 12.** The commission on labor disputes of the enterprise, institution, or organization shall have the stamp of an established model.

**Article 13.** The organizational-technical provision of the commission on labor disputes (the affording of a furnished location, a typewriter and other equipment, and the necessary literature; the organization of record keeping; the registration and storage of workers' petitions and files; and the preparation and issue of copies of decisions, and so on) shall be carried out by the administration of the enterprise, institution, or organization (subdivision).

### III. Examination of Labor Disputes by Trade Union Committees of Enterprises, Institutions, and Organizations (Subdivisions)

**Article 14.** The trade union committee of the enterprise, institution, or organization (subdivision) shall examine labor disputes at the petition of a worker or administration in disagreement with the decision of the commission on labor disputes, with the exception of those instances envisaged in the second part of article 11, point 3 of article 21, the second and third parts of article 1, and article 22 of the present law.

**Article 15.** In examining the petition of a worker or administration of an enterprise, institution, or organization (subdivision) in disagreement with the decision of the commission on labor disputes, the trade union committee of the enterprise, institution, or organization (subdivision) shall submit a resolution on the essence of the dispute.

**Article 16.** The trade union committee of the enterprise, institution, or organization (subdivision) shall examine

the petition on a labor dispute within ten days of its submission in observance of the procedure stipulated by article 7, the third part of article 8, and article 9 of the present law.

A meeting of the trade union committee shall be considered competent if more than half of its elected members are present.

A resolution of the trade union committee must respond to the demands submitted for the decision of the commission on labor disputes (article 10 of the present law).

Copies of the resolution shall be issued within three day's time to the interested worker and administration of the enterprise, institution, or organization (subdivision).

**Article 17.** The resolution of the trade union committee may be appealed in court by the interested worker or administration within ten days of the resolution's passage.

#### **IV. Procedure for Implementing the Decision of the Commission on Labor Disputes and the Resolution of the Trade Union Committee of the Enterprise, Institution, or Organization (Subdivision)**

**Article 18.** The decision of a commission on labor disputes or the resolution of a trade union committee is subject to implementation by the administration of the enterprise, institution, or organization (subdivision) within three days of the expiration of the ten-day period provided for their appeal (articles 11 and 17 of the present law), with the exception of instances envisaged by the second part of article 26 of the present law.

**Article 19.** In the event of nonimplementation by the administration of the enterprise, institution, or organization (subdivision) of the decision of the commission on labor disputes or the resolution of the trade union committee within the established time (article 18 of the present law), the worker shall be issued in accordance with the commission on labor disputes of the enterprise, institution, or organization or the trade union committee of the enterprise, institution, or organization a certificate having the force of a writ of execution.

The certificate shall indicate: the designation of the organ that has issued the decision or resolution on the labor dispute; the date of its passage or of the certificate's issue; the last name, first name, and patronymic of the worker; the decision on the essence of the dispute. The certificate shall be validated by the signature of the chairman or deputy chairman of the commission on labor disputes of the enterprise, institution, or organization or the chairman or deputy chairman of the trade union committee of the enterprise, institution, or organization and by the seal of the commission on labor disputes or the trade union committee.

The certificate shall not be issued if the worker or the administration of the enterprise, institution, or organization (subdivision) has appealed within the established period with a petition to resolve the labor dispute to the

trade union committee or the rayon (city) people's court (articles 11 and 17 of the present law).

**Article 20.** On the basis of the certificate issued by the commission on labor disputes of the enterprise, institution, or organization or by the trade union committee of the enterprise, institution, or organization and presented within no more than three months' time to the rayon (city) people's court, an officer of the court shall implement the decision of the commission on labor disputes or the resolution of the trade union committee in compulsory fashion.

Should the worker miss the established three-month deadline for valid reasons, the commission on labor disputes of the enterprise, institution, or organization or the trade union committee of the enterprise, institution, or organization that issued the certificate may renew that deadline.

#### **V. Examination of Labor Disputes in Rayon (City) People's Courts**

**Article 21.** Rayon (city) people's courts shall examine labor disputes:

- 1) at the petition of a worker, administration, or trade union, should they not agree with the decision of the commission on labor disputes;
- 2) at the petition of the worker or administration, should they not agree with the resolution of the trade union committee;
- 3) at the petition of the worker or administration should they not agree with the decision of the commission on labor disputes if the enterprise, institution, or organization (subdivision) has several trade unions;
- 4) at the petition of the procurator, if the decision of the commission on labor disputes or the resolution of the trade union committee contradicts legislation.

**Article 22.** Labor disputes shall be examined directly in rayon (city) people's courts at the petition:

- 1) of workers in enterprises, institutions, and organizations where a commission on labor dispute has not been elected;
- 2) of workers on their reinstatement to a job, regardless of the grounds for curtailing the labor contract, on a change in the date or formulation of the reasons for dismissal, and on wages for the time of enforced absence or performance of lower-paying work, with the exception of disputes of workers indicated in the second and third parts of article 1 and in the second part of article 2 of the present law;
- 3) of administrations on compensation by workers for material loss incurred by the enterprise, institution, or organization;
- 4) of workers over an issue in the application of labor legislation that in accordance with current legislation

**was resolved by the administration and trade union committee of the enterprise, institution, or organization (subdivision) within the framework of the rights granted them.**

**The rayon (city) people's courts shall directly examine as well disputes over refusal to hire:**

- individuals invited to work by way of transfer from another enterprise, institution or organization;
- young specialists who have graduated from a higher or secondary special educational institution, as well as individuals who have graduated from a professional-technical educational institution and have been assigned according to established procedure to work in the given enterprise, institution, or organization;
- other individuals with whom the administration of the enterprise, institution, or organization is obligated by legislation to conclude a labor contract.

**Article 23. The petition to resolve a labor dispute shall be submitted directly to the rayon (city) people's court within three months of the date when the worker found out or should have found out about the violation of his right, and for cases of dismissal, within a month of the day of issue of the dismissal order or the day the work record was returned.**

A deadline is set for the administration to appeal to the court on matters of penalties against a worker for material loss incurred by the enterprise, institution, or organization of one year from the day the damage caused by the worker is discovered.

Should deadlines established in the present law be missed for valid causes, they may be renewed by the court.

**Article 24. Workers appealing to the rayon (city) people's court on demands stemming from labor legal relations shall be freed from the payment to the state of court costs.**

## **VI. Issuance and Implementation of Resolutions on Disputes Over Dismissal and Transfer**

**Article 25. In the event of dismissal without legal grounds or illegal transfer to another job, the worker must be reinstated at his present job by the organ examining the labor dispute.**

Upon the issuance of a decision on job reinstatement, the organ examining the labor dispute shall simultaneously make a decision on payment to the worker of his average salary for the time of enforced absence or the difference in pay for the time of performing lower-paying work, but for no more than one year.

Should the formulation of the cause for dismissal be deemed incorrect or not in accordance with current legislation, the organ examining the labor dispute is obliged to change it and indicate in its decision the cause

for dismissal in precise correspondence with the formulation of current legislation and with citation to the corresponding article (point) of the law. If an incorrect formulation of the cause for dismissal or a formulation that does not correspond to current legislation has impeded the worker in getting a new job, the organ examining the labor dispute shall simultaneously make a decision about payment to him of his average salary for the time of enforced absence, but for no more than one year.

**Article 26. A decision about reinstatement of an illegally dismissed or transferred worker passed by an organ examining labor disputes is subject to immediate implementation.**

Should the administration of an enterprise, institution, or organization delay in implementing a decision of the court or in reinstating an illegally dismissed or transferred worker, the court that passed the decision on reinstating the worker shall issue a determination of payment to him of his average salary or the difference in salary for the time of the delay.

**Article 27. In examining labor disputes on monetary demands, other than demands for payment to the worker of his average salary during the time of enforced absence or the difference in salary for the time of performance of lower-paying work (articles 25 and 34 of the present law), the organ examining the dispute has the right to issue a decision on the payment to the worker of sums due him for no more than three years.**

## **VII. Examination of Labor Disputes by Superior Organs**

**Article 28. Superior organs of state power and administration shall examine labor disputes of leading workers elected, confirmed, or appointed to their positions by superior organs of state power and administration of the USSR and the republics on issues of dismissal, changes in the date or formulation of the reason for dismissal, transfer to another job, payment for the time of enforced absence, or performance of lower-paying work in the imposition of disciplinary penalties.**

**Article 29. The worker shall submit a petition within three months' time to the superior organ of state power and administration authorized to make a decision on the dispute, and on an issue of dismissal within a month from the day of issuance to him of a copy of the resolution or order (instruction) on the imposition of the penalty or from the day his work record is given back. Should the established deadline be missed for valid reasons, the superior organ may renew the deadline and examine the labor dispute in essence.**

**Article 30. The superior organ is obligated to examine the labor dispute within a month of the day of the petition's submission. The dispute shall be resolved in the presence of the worker. Examination of the dispute in the absence of the worker is permitted only with his**

written consent or if he has not appeared without valid reasons on the second summons.

The organ examining the dispute has the right to invite a representative of the organ of state power or administration that made the disputed decision as well as a representative of the trade union or other public organizations.

**Article 31.** The decision of the superior organ on the labor dispute must be based on legislation and justified.

**Article 32.** In the event of a worker's dismissal or the imposition on him of a disciplinary penalty without legal foundation, the superior organ shall make a decision on repealing the resolution or decree (instruction).

**Article 33.** Copies of the decision of the superior organ shall be sent or delivered within three days' time after the examination of the dispute in essence to the worker as well as to the organ whose action was disputed.

In examining a labor dispute over a disciplinary penalty, the superior organ does not have the right to apply to the worker a stronger measure of disciplinary penalty, but it can rescind the applied measure of disciplinary penalty for a milder one taking into account the concrete circumstances under which the disciplinary violation was committed as well as the worker's previous work and behavior.

**Article 34.** In the event the worker is reinstated to his former job by decision of the superior organ, payment shall be made for the time of enforced absence from the day of dismissal or for the time of performance of lower-paying worker, but not for more than one year.

**Article 35.** The decision of the superior organ on reinstating an illegally dismissed worker to his former job, as well as payment to him of his salary for the time of enforced absence or performance of lower-paying work, in accordance with current legislation, shall be subject to immediate implementation.

Should there be a delay in implementation of the relevant decision of the superior organ, this organ shall make a decision about the payment of the average salary or the difference in salary for the time of the delay.

[signed] USSR President M. Gorbachev, Moscow, Kremlin, 11 March [May?] 1991

**USSR Law on Amendments to Labor Legislation**  
914A0763B Moscow IZVESTIYA in Russian 18 May  
91 Union Edition pp 4,5

[Text of amendments, issued by USSR President M. Gorbachev: "USSR Law on Amendments and Additions to the Legislative Acts of the USSR on Labor"]

[Text] Moscow, the Kremlin, 12 May—The Supreme Soviet of the Union of Soviet Socialist Republics resolves:

To introduce the following amendments and additions to the legislative acts of the USSR on labor:

1. To the Legislative Foundations of the USSR and the union republics on labor confirmed by the USSR law of 15 July 1970 (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1970, No 29, art 265; 1980, No 12, art 214; 1982, No 19, art 318; 1983, No 5, art 74, No 33, art 507; 1984, No 24, art 422, 1986, No 22, art 364; 1988, No 6, art 95):

1) to supplement the Foundations with article 17<sup>1</sup> of the following content:

**"Article 17<sup>1</sup>. Additional grounds for the cessation of the labor contract for certain categories of workers"**

"In addition to the grounds stipulated by article 17 of the present Foundations, the labor contract of certain categories of workers may be curtailed in these instances:

"1) a one-time crude violation of labor obligations by the director of the enterprise, institution, or organization (affiliate, representative, department, or other distinct subdivision) and his deputies;

"2) commission of guilty acts by a worker dealing directly with monetary or goods valuables, if those acts provide grounds for loss of confidence in him on the part of the administration;

"3) commission by a worker fulfilling an educative function of an immoral act incompatible with continuation of the given job.

"The legislation of the USSR and, within the limits defined by it, the legislation of the union republics may establish additional grounds for curtailing the labor contract of certain categories of workers in the presence of a violation of established rules of hiring and in other instances".

2) to put forth article 18 in the following edition:

**"Article 18. A breaking of the labor contract at the initiative of the administration of the enterprise, institution, or organization with prior agreement or with consideration of the opinion of the corresponding trade union committee"**

"A breaking of the labor contract on the grounds provided in points 1 (other than instances of elimination of the enterprise, institution, or organization), 1<sup>1</sup>, 2, 5 of article 17 of the present Foundations may be brought about only with the prior consent of the corresponding trade union committee.

"A breaking of the labor contract on the grounds provided in points 3, 4, 7, and 8 of article 17, and points 2 and 3 of article 17<sup>1</sup> of the present Foundations, shall be brought about with consideration for the opinion of the corresponding trade union committee. The negative opinion of the trade union committee shall not impede the breaking of the labor contract.

"The trade union committee shall notify the administration in written form about the decision made within ten days' time";

3) to supplement the Foundations with article 18<sup>1</sup> of the following content:

**"Article 18<sup>1</sup>. A breaking of the labor contract at the initiative of the administration of the enterprise, institution, or organization without the prior consent or consideration of the opinion of the corresponding trade union committee"**

"A breaking of the labor contract at the initiative of the administration of the enterprise, institution, or organization without the consent or consideration of the opinion of the corresponding trade union committee shall be permitted in the following instances:

"—liquidation of the enterprise, institution, or organization;

"—unsatisfactory result of the post-hiring trial period;

"—dismissal from a combined job in connection with the hiring of another worker who does not combine jobs, as well as in connection with restrictions on working combined jobs stipulated by legislation;

"—reinstatement of a worker or employee who previously performed this job;

"—dismissal of a worker who is not a member of the trade union functioning in the enterprise, institution, or organization;

"—dismissal from an enterprise, institution, or organization where there is no trade union committee;

"—dismissal of the director of an enterprise, institution, or organization (affiliate, representative, department, or other distinct subdivision), his deputies who supervise workers and are elected, confirmed, or appointed to their position by organs of state power and administration, as well as by public organizations and other associations of citizens.

"Legislative acts of the USSR and the union republics may stipulate other instances as well for a breaking of the labor contract at the initiative of the administration without the consent or consideration of the opinion of the corresponding trade union committee";

4) in the designation and second part of article 54, to replace the words: "Statutes on Discipline" with the words: "Statutes and Provisions on Discipline";

5) in article 56:

point 5 shall be put forth in the following edition:

"(5) dismissal (points 3, 4, 7, and 8 of article 17, as well as point 1 of article 17<sup>1</sup>)";

the second part shall be put forth in the following edition:

"Legislative acts of the USSR and union republics and statutes and provisions about discipline may also stipulate other disciplinary penalties for individual categories of workers and employees";

to supplement the article with a fourth part of the following content:

"In the imposition of a disciplinary penalty, the gravity of the act committed, the circumstances in which it was committed, the worker's previous behavior, and his attitude toward labor must be taken into account";

6) to supplement the Foundations with articles 56<sup>1</sup>, 56<sup>2</sup>, and 56<sup>3</sup> of the following content:

**"Article 56<sup>1</sup>. Organs authorized to impose disciplinary penalties"**

A disciplinary penalty shall be imposed by an organ which has been granted the right to hire (elect, confirm, or appoint to the position) a given worker.

Disciplinary penalties on workers bearing disciplinary responsibility according to the statutes, provisions, and other acts of legislation of the USSR and union republics on discipline, may be imposed as well by organs superior to the organs indicated in the first part of the present article.

Workers occupying elective positions may be dismissed only at the decision of the organ that elected them, and only on grounds envisaged by legislation.

**Article 56<sup>2</sup>. The procedure for imposing and appealing disciplinary penalties**

Before the imposition of a disciplinary penalty, a written explanation must be requested from the worker.

A disciplinary penalty shall be imposed directly upon the revelation of the act, but no later than one month from the day of its revelation, not counting the time of the worker's illness or vacation.

The penalty may not be imposed after more than six months from the day of the act's commission, and upon the results of a review or verification of financial-economic activity, no later than two years from the day of its commission. Time spent on the criminal case is not included in the indicated terms.

Only one disciplinary penalty may be imposed for each act.

The decree (instruction) or resolution regarding the imposition of a disciplinary penalty with an indication of the motives for its imposition shall be announced (reported) to the worker subject to the penalty, the receipt of which he will have to acknowledge by signature.

A disciplinary penalty may be appealed according to the procedure established by legislation.

The organ examining the labor dispute has the right to consider the gravity of the act committed, the circumstances in which it was committed, the worker's previous behavior, his attitude toward labor, as well as the correspondence between the disciplinary penalty and the gravity of the act committed.

**Article 56<sup>3</sup>. Lifting of the disciplinary penalty**

If over the course of a year from the day of the imposition of the disciplinary penalty the worker is not subject to a new disciplinary penalty, then he is considered not to be subject to a disciplinary penalty.

The organ that imposed the penalty may lift it before the expiration of the year at its own initiative or at the petition of the immediate supervisor or labor collective, if the person subjected to the penalty has not committed a new act and has shown himself to be a conscientious worker.

In the course of the period that the disciplinary penalty is in effect, incentive measures shall not be applied to the worker":

7) to set forth article 86 in the following edition:

**"Article 86. Organs examining labor disputes**

"Labor disputes over issues of applying legislative and other normative acts on labor, the collective contract, and other labor agreements shall be examined:

"1) by commissions on labor disputes;

"2) by trade union committees of enterprises, institutions, and organizations (subdivisions);

"3) by rayon (city) people's courts.

"Labor disputes of certain categories of workers over individual issues shall be examined by superior organs (article 94 of the present Foundations).

"Labor disputes on establishing for the worker new or altered working conditions shall be resolved by the administration of the enterprise, institution, or organization and the corresponding trade union committee within the limits of the rights granted them";

8) to exclude the second part of article 87;

9) to set forth article 88 in the following edition:

**"Article 88. The examination of labor disputes by the trade union committee of the enterprise, institution, or organization (subdivision)**

"The trade union committee of the enterprise, institution, or organization (subdivision) shall examine labor disputes at the petition of workers and employees or the administration when they do not agree with the decision of the commission on labor disputes if legislation does not provide another procedure for their examination. The trade union shall pronounce judgment on the essence of the dispute";

10) to put forth article 89 in the following edition:

**"Article 89. Examination of labor disputes in rayon (city) people's courts**

"In rayon (city) people's courts labor dispute shall be examined:

"1) at the petition of the worker, employee, administration, or trade union when they do not agree with the decision of the commission on labor disputes;

"2) at the petition of the worker, employee, or administration, when they do not agree with the decision of the trade union committee;

"3) at the petition of the worker, employee, or administration, should they disagree with the decision of the commission on labor dispute if the enterprise, institution, or organization (subdivision) has several trade unions;

"4) at the petition of the procurator, if the decision of the commission on labor disputes or the decision of the trade union committee contradicts legislation.

"Labor disputes shall go directly to rayon (city) people's courts for examination at the petition:

"1) of workers or employees of enterprises, institutions, or organizations where commissions on labor disputes have not been elected;

"2) of workers and employees on reinstatement regardless of the grounds for curtailing the labor contract, on a change in the date or formulation of the cause for dismissal, on payment for the time of enforced absence or performance of lower-paying work, with the exception of disputes of workers for whom another procedure for examination has been stipulated;

"3) of the administration over compensation by workers and employees for material loss they incur to the enterprise, institution, or organization;

"4) of workers and employees on the issue of the application of labor legislation that in accordance with current legislation was resolved by the administration and trade union committee of the enterprise, institution, or organization (subdivision) within the limits of the rights granted them.

"Also to be sent directly to rayon (city) people's courts for examination are disputes over the refusal to hire:

"—individuals invited to work in a transfer procedure from another enterprise, institution, or organization;

"—young specialists who have graduated from a higher or secondary special educational institution, as well as individuals who have graduated from a professional-technical educational institution and assigned to work according to established procedure in the given enterprise, institution, or organization;

"—other individuals with whom the administration of the enterprise, institution, or organization, in accordance with legislation, is obligated to conclude a labor agreement";

11) to put forth the fourth part of article 90 in the following edition:

"Complaints submitted upon the expiration of two years from the moment a decision of the court or decision of a superior organ on the refusal to reinstate has gone into legal force is not subject to examination";

12) to put forth the second part of article 91 in the following edition:

"If the breaking of the labor contract with the worker or employee is carried out by the administration of the enterprise, institution, or organization without referral to the corresponding trade union committee (article 18 of the present Foundations), the court shall halt the case, request the agreement or opinion of the trade union committee, and after its receipt examine the dispute in essence. In the event of the trade union committee's refusal to give its consent to the dismissal of the worker (first part of article 18 of the present Foundations), the court shall make the decision to reinstate him on the job";

13) in article 91, to replace the words "but for no more than three months" with the words "but for no more than one year";

14) to put forth article 94 in the following edition:

**"Article 94. The examination of disputes of certain categories of workers on issues of dismissal, transfer to another job, and imposition of disciplinary penalties"**

"Disputes of supervisors of workers elected, confirmed, or appointed to their positions by superior organs of state power and administration of the USSR and the union and autonomous republics, judges, procurators, their deputies and assistants, as well as investigators from the procurator's office on issues of dismissal, change in the date and formulation of the cause for dismissal, transfer to another job, payment for time of enforced absence or performance of lower-paying work and imposition of disciplinary penalties shall be examined by superior organs.

"In the event of the reinstatement of a worker to his former job at the decision of the superior organ, payment shall be made for the time of enforced absence from the day of dismissal or for the time spent performing lower-paying work, but not for more than one year. Here articles 92 and 93 of the present Foundations shall be applied accordingly";

15) to exclude from the second part of article 99<sup>4</sup> the words "Complaints of directors and foremen on liberation from work and of brigadiers from the leadership of the brigade shall be examined jointly by higher economic and trade union organs";

16) to put forth point 4, article 106, in the following edition:

"4) additional grounds for cessation of the labor contract of certain categories of workers and employees given specific conditions";

17) in the first part of article 197, to replace the words "categories of workers whose labor dispute are examined in the subordination procedure (first part of article 94)" with the words "categories of workers whose labor disputes are examined by superior organs (first part of article 94)".

2. To put forth articles 18 and 19 of the provision on the rights of the trade union committee of the enterprise, institution, or organization, confirmed by the Decree of the Presidium of the USSR Supreme Soviet of 27 September 1971 (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1971, No 39, art 382; 1982, No 19, art 318; 1988, No 6, art 95) in the following edition:

"18. Before breaking a labor contract at the initiative of the administration of the enterprise, institution, or organization, the decision to break it must be conveyed in written form to the corresponding trade union committee for its consent or opinion on the dismissal of the worker, with the exception of instances envisaged by legislative acts of the USSR and union republics.

"19. The trade union committee of the enterprise, institution, or organization shall examine the labor disputes at the petition of workers and employees or the administration when they do not agree with the decision of the commission on labor disputes if legislation does not stipulate a different procedure for their examination. The trade union committee shall issue a resolution on the essence of the dispute".

3. To recognize the following as having lost their force:

—the resolution of the USSR Central Executive Committee (TSLK) and Council of People's Commissars (SNK) of 13 October 1929: "On the foundations of disciplinary legislation of the USSR and the union republics" (USSR Collection of Laws [SZ], 1929, No 71, art 670);

—point 86 of the TSLK resolution of 8 December 1929: "On confirmation of resolutions passed during the period between the sessions of the Central Executive Committee of the USSR and subject on the basis of art 18 of the Constitution of the USSR to confirmation by the second session of the fifth Central Executive Committee of the USSR" (USSR SZ, 1929, No 75, art 723);

—the resolution of the TSLK and SNK of 7 July 1932 "On the responsibility of the workers of institutions and administrative apparatus of economic organs for violation of the rules of general and fire safety for office buildings and sites and the rules for preserving office documents" (USSR SZ, 1932, No 53, art 319);

—the decree of the Presidium of the USSR Supreme Soviet of 3 September 1956: "On amending the resolution of the TsIK and SNK of 7 July 1932 'On the responsibility of workers of institutions and administrative apparatus of economic organs for violation of the rules of general and fire safety for office buildings and sites and the rules for preserving office documents" (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1956, No 18, art 391);

—article 2 of the Decree of the Presidium of the USSR Supreme Soviet of 19 January 1961: "On the amendment and recognition as loss of force of the legislative acts related to the USSR law of 11 February 1957 'On referral to the competence of the union republics of legislation on the arrangement of the courts of the union republics and the passage of civil, criminal, and procedural codes,' by the USSR laws of 25 December 1958 confirming the Foundations of Criminal Legislation, Foundations of Legislation on the Judicial System, Foundations of Criminal Prosecutions, Provisions on Military Tribunals, and the laws of the USSR of 25 December 1958 on criminal responsibility for state and military crimes (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1961, No 4, art 35);

—the resolution of the USSR Supreme Soviet of 30 September 1965 "On the procedure for applying article 19 of the provision on the rights of the factory, plant, and local trade union committee" (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1965, No 40, art 587);

—the decree of the Presidium of the USSR Supreme Soviet of 7 May 1974: "On the procedure for examining labor disputes on issues of dismissal or change in the formulation of the reasons for the dismissal of teachers in general education schools recognized as a result of attestation not to be commensurate with the position occupied" (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1974, No 20, art 307);

—the Decree of the Presidium of the USSR Supreme Soviet of 20 May 1974 "On confirmation of the provision on the procedure for examining labor disputes" (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1974, No 22, art 325);

—articles 12 and 13 of the Decree of the Presidium of the USSR Supreme Soviet of 26 January 1983: "On introducing amendments in several legislative acts of the USSR on issues of civil legal relations, marriage and the family, labor, and social security" (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1983, No 5, art 74); —article 3 of the Decree of the Presidium of the USSR Supreme Soviet of 12 August 1983: "On introducing amendments and additions to several legislative acts of the USSR" (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1983, No 33, art 507);

The USSR law of 26 July 1974: "On confirming the decrees of the Presidium of the USSR Supreme Soviet on the procedure for examining labor disputes" (VEDOMOSTI VERKHOVNOGO SOVETA SSSR, 1974, No 31, art 469).

[signed] USSR President M. Gorbachev, Moscow, Kremlin, 12 May 1991

### Resolution on Enacting Labor Laws

914A0763C Moscow IZVESTIYA in Russian  
18 May 91 Union Edition p 5

[Resolution of the USSR Supreme Soviet, issued by USSR Supreme Soviet Chairman A. Lukyanov: "On putting into effect the USSR law 'On procedures for resolving individual labor disputes' and the USSR law 'On introducing amendments and additions to the legislative acts of the USSR on labor'"]

[Text] The USSR Supreme Soviet resolves:

1. To put into effect the USSR law "On procedures for resolving individual labor disputes" as of 1 July 1991.

The present law covers labor disputes examined after 1 July 1991.

2. Decisions on labor disputes made before 1 July 1991, but not implemented at the time the USSR law: "On procedures for resolving individual labor disputes" goes into effect shall be subject to implementation in accordance with the requirements of the present law.

3. To establish that in the same procedure, as of 1 July 1991, the USSR law: "On introducing amendments and additions to the legislative acts of the USSR on labor" shall go into force.

4. The USSR Cabinet of Ministers, before 1 July 1991, shall bring the statutes and provisions on discipline current in several branches of the economy for individual categories of workers into line with the present laws.

5. To recommend that the republics' supreme soviets introduce into republic legislation on labor the amendments and additions stemming from the present laws.

[signed] USSR Supreme Soviet Chairman A. Lukyanov, Moscow, Kremlin, 12 May 1991

### USSR Law on Resolving Collective Labor Conflicts

#### Text of Amendment

914F0232A Moscow IZVESTIYA in Russian  
31 May 91 Union Edition p 4

[Law of the Union of Soviet Socialist Republics on Making Changes in and Writing Additions to the USSR Law "On the Procedure of Resolution of Collective Labor Disputes (Conflicts)"]

[Text] The Supreme Soviet of the Union of Soviet Socialist Republics decrees:

To make changes in and to write additions to the USSR Law dated 9 October 1989 "On the Procedure of Resolution of Collective Labor Disputes (Conflicts)" (VEDOMOSTI SYEZDA NARODNYKH DEPUTATOV SSSR I VERKHOVNOGO SOVETA SSSR, 1989, No 18, article 342), setting it forth in a new version.

[signed] M. Gorbachev, President of the Union of Soviet Socialist Republics, Moscow, Kremlin, 20 May 1991

### Text of Law

914F0232B Moscow IZVESTIYA in Russian  
31 May 91 Union Edition p 4

[Law of the Union of Soviet Socialist Republics "On the Procedure of Resolution of Collective Labor Disputes (Conflicts)"]

[Text]

**Article 1.** This law regulates the procedure of resolution of collective labor disputes (conflicts) on matters concerning the establishment of new socioeconomic working and living conditions or change in existing ones at an enterprise, an institution, or an organization and conclusion and execution of collective contracts and other agreements between the administration of an enterprise, an institution, or an organization, on the one hand, and the labor collective (collective of a subdivision) or the trade union, on the other.

The procedure of resolution of collective labor disputes (conflicts) established by this law also extends to collective labor disputes (conflicts) between labor collectives of two enterprises, institutions, or organizations and more and between trade unions and corresponding management bodies.

**Article 2.** Demands by the labor collective or the trade union concerning matters indicated in article 1 of this law are formed and approved at a general meeting (conference) by a majority of votes of members of this collective or trade union, or delegates to a conference.

Demands put forward by the collective or the trade union are presented in writing and sent to the administration of an enterprise, an institution, or an organization.

The body authorized by the labor collective or the trade union represents their interests.

The administration of an enterprise, an institution, or an organization must examine the demands put forward within a three-day period following the day on which they are received and report its decision without delay. The adopted decision must be set forth in writing and brought to the attention of the entire labor collective or the trade union.

Demands concerning matters not provided for by article 1 of this law are not subject to examination.

The administration must inform the local soviet of people's deputies of every case of a collective labor dispute (conflict).

**Article 3.** Demands by the labor collective or the trade union, which are rejected or met partially, are examined by:

a) conciliation commissions;

b) labor arbitration boards.

No party has the right to avoid participation in the conciliation procedure.

**Article 4.** Conciliation commissions are established within a three-day period on the initiative of one of the parties out of an equal number of their representatives and examine demands by the labor collective or the trade union within a five-day period. Commissions consult labor collectives, the administration, executive and administrative bodies of local soviets of people's deputies, and other interested organizations and must take advantage of all the opportunities at their disposal to settle the collective labor dispute (conflict) that has arisen.

The decision by a commission is made by an agreement between the parties on the basis of negotiations, is legalized by a record, and has an obligatory force for the parties.

When an agreement is not reached in a conciliation commission, a labor arbitration board is established for the resolution of a collective labor dispute (conflict).

**Article 5.** A labor arbitration board is established within a 10-day period by the parties to a collective labor dispute (conflict) with the participation of the executive and administrative body of the corresponding soviet of people's deputies.

The quantitative and personal composition of a labor arbitration board for every conflict is determined by the parties. The chairman of a labor arbitration board is appointed by an agreement between the parties out of the members of this labor arbitration board.

A labor arbitration board can include people's deputies, representatives of trade-union bodies and bodies for labor and social problems, expert specialists, and other persons.

A collective labor dispute (conflict) is examined by a labor arbitration board with mandatory participation by representatives of the parties and, if necessary, representatives of other interested bodies.

A labor arbitration board must make a decision within a seven-day period from the day of its establishment.

The decision by a labor arbitration board is obligatory for execution if the parties agree on this in advance.

**Article 6.** The parties and conciliation bodies must take advantage of every opportunity to eliminate the reasons and circumstances leading to a collective labor dispute (conflict).

If a conciliation commission and a labor arbitration board are unable to settle the differences between the parties, the reasons for this are brought to the attention of the labor collective or the trade union in writing. In this case, in order to meet the demands put forward in accordance with article 2 of this law, the labor collective or the trade union has the right to use all the other means provided for by law, including a complete or a partial stoppage of work (absence from work and nonfulfillment of labor duties) at an enterprise, an institution, or an organization—strikes (walkouts).

**Article 7.** A strike is an extreme measure of resolution of a collective labor dispute (conflict).

A decision on a strike is made at a meeting (conference) of the labor collective or the trade union by secret ballot and is considered made if no less than two-thirds of the members of this collective or trade union (delegates to a conference) vote for it. The body authorized by the labor collective or the trade union heads the strike.

No one can be forced to participate or not to participate in a strike.

The administration should be warned in writing about the beginning of a strike and its possible duration no later than two weeks before it.

The administration immediately warns suppliers, consumers, and transport organizations, as well as other interested enterprises, institutions, and organizations, about the possibility of the forthcoming strike.

**Article 8.** The body heading the strike acts within the rights provided for by legislation and this law, represents the interests of the labor collective or the trade union in the course of the strike, and advises the population through mass information media of the course of resolution of the collective labor dispute (conflict) that has arisen. These powers are terminated if the parties sign an agreement on a settlement of the collective labor dispute (conflict) that has arisen, as well as in case a strike is declared illegal.

During the exercise of its powers the body heading the strike does not have the right to make decisions pertaining to the competence of the administration of an enterprise, an institution, or an organization, bodies of state power and management, and public organizations.

Control over the fulfillment of the terms of the agreement worked out in the course of resolution of a collective labor dispute (conflict) is exercised by the parties, or by the bodies authorized by them.

**Article 9.** The following strikes are declared illegal:

a) strikes for political reasons, including with demands for a change in the constitutional system, for the convocation, dissolution, or change in the procedure of activity of superior bodies of state power, and for the resignation of their leaders or state and republic leaders, as well as with demands involving a violation of national and racial equality or a change in borders;

b) strikes called without the observance of provisions of articles 2 to 4 of this law, which begin or continue in violation of the demands of articles 5 and 7 and articles 10 and 12 of this law.

A decision on declaring a strike, which has been called or has begun, illegal is made by superior courts of republics, which do not have an oblast division, by kray and oblast (city) courts, and by courts of autonomous oblasts and autonomous okrugs no later than 10 days after an appropriate declaration by the administration of an enterprise, an institution, or an organization, by the executive and administrative body of a local soviet of people's deputies, or by an appropriate procurator and is brought to the attention of the labor collective or the trade union through the body heading the strike and mass information media.

A decision on declaring a strike illegal obligates the labor collective or the trade union to call it off, or to suspend it, and to resume work no later than on the day following the handing in of a copy of the decision to the body heading the strike.

**Article 10.** The USSR President has the right to postpone the conduct of a strike, or to suspend it for a period of up to two months.

The same right is granted to top officials or supreme bodies of state power in republics, unless otherwise specified by the legislation of a republic.

**Article 11.** The administration, the executive and administrative body of the local soviet of people's deputies, the labor collective or the trade union participating in the strike, and the body heading the strike must take the necessary steps to ensure the viability of an enterprise, an institution, or an organization, to preserve state and public property, and to observe law and public order.

**Article 12.** Work stoppage as a means of resolving a collective labor dispute (conflict) is not permitted if this creates a threat to people's life and health, as well as at enterprises and organizations of railroad and city public transportation (including subways), civil aviation, communication, power engineering, and defense sectors (at subdivisions directly engaged in the production of products for defense purposes), at state bodies, at enterprises and organizations entrusted with the fulfillment of tasks of ensuring the country's defense capacity, law and order, and security, and in continuously operating industries, the stoppage of which is connected with serious and dangerous consequences.

Labor collectives of the indicated enterprises and organizations or trade unions, after the observance of the conciliation procedure provided for by articles 4 and 5 of this law, have the right to appeal for the protection of their legitimate rights and interests to the USSR President, or to the USSR Prime Minister, and to top officials in republics, who examine their demands and make appropriate decisions on them within a one-month period. The legislation of republics can establish another procedure of examination of such demands.

**Article 13.** Participation in strikes (with the exception of strikes indicated in article 9 of this law) cannot be considered a breach of labor discipline and entail the application of measures of a disciplinary and another effect provided for by legislation.

During the strike the wages of workers participating in it are not retained.

The labor collective or the trade union has the right to establish a strike fund from voluntary contributions and donations, as well as a special insurance fund.

The wages of workers, who do not take part in the strike, but in connection with it are unable to perform their jobs, are retained in amounts not below those established by legislation as for idle time not through the worker's fault.

**Article 14.** The organization of a strike declared illegal by a court, or participation in it, is considered a breach of labor discipline and can entail the application of measures of a disciplinary effect provided for by legislation.

Additional measures of effect provided for by collective contracts and agreements can be applied to workers who participate in an illegal strike and do not begin work within the period established by the third part of article 9 of this law.

Disciplinary proceedings, including dismissal, are instituted against managers and other officials guilty of the outbreak of collective labor disputes (conflicts) or of a delay in the execution of decisions by a conciliation commission or a labor arbitration board and, if their actions cause financial damage, they bear financial liability in the amount of up to three-month average wages, or in the amount provided for in the contract.

**Article 15.** Damage done to other enterprises, institutions, organizations, or citizens as a result of a strike is compensated for in accordance with existing legislation.

Compensation for the damage done to the owner during an illegal strike conducted in accordance with the decision of the labor collective is made from the consumption fund of an enterprise, an institution, or an organization in legal form.

If an illegal strike is conducted on the initiative of the trade union, compensation for the damage is made from its funds in an amount determined by the court with due regard for the property position of the trade union.

**Article 16.** A fine in an amount of up to 1,000 rubles can be imposed by court order on persons representing the interests of the parties committing a violation of the rules provided for by the sixth part of article 2, the second part of article 3, the second and third parts of article 4, and the sixth part of article 5 of this law and of up to 3,000 rubles, on officials.

**Article 17.** Measures of a disciplinary effect, including dismissal, can be applied to persons who organize a strike declared illegal by a court, or who do not fulfill the decision on declaring a strike illegal or on its postponement or stoppage (articles 9 and 10), as well as to persons urging the continuation of an illegal strike or hampering its termination. By court order these persons can be subject to a fine in an amount of up to 3,000 rubles.

Persons forcing [people to participate in] a strike by means of violence or threat of use of violence are punished with imprisonment for a period of up to 1 year, or with correctional labor for a period of up to 2 years at places determined by the bodies executing the punishment.

### Resolution on Enactment of Law

914F0232C Moscow *IZVESTIYA* in Russian  
31 May 91 Union Edition p 4

[Decree of the USSR Supreme Soviet on Enactment of the USSR Law "On the Procedure of Resolution of Collective Labor Disputes (Conflicts)"]

[Text] The USSR Supreme Soviet decrees:

1. To enact the USSR Law "On the Procedure of Resolution of Collective Labor Disputes (Conflicts)" in the new version from the moment of publication.
2. To instruct the USSR Committee on Glasnost and Citizens' Rights and Appeals of the USSR Supreme Soviet, the Committee on Legislation and Law and Order of the USSR Supreme Soviet, and the Committee on State Construction of the USSR Supreme Soviet to prepare draft laws regulating the procedure of realization of citizens' demands for political reasons and political activity at enterprises, institutions, and organizations and to submit them to the sixth session of the USSR Supreme Soviet for consideration.
3. To instruct the USSR Cabinet of Ministers to submit in accordance with the established procedure proposals on bringing USSR legislation in conformity with the USSR Law "On the Procedure of Resolution of Collective Labor Disputes (Conflicts)" to the USSR Supreme Soviet before 1 July 1991.
4. To recommend that supreme soviets of republics bring the legislation of republics in conformity with this law and adopt the necessary legislative acts.

[signed] A. Lukyanov, chairman of the USSR Supreme Soviet, Moscow, Kremlin, 20 May 1991

### Deputy Shalayev Explains Law

914F0232D Moscow *TRUD* in Russian 31 May 91 p 2

[Interview with S. Shalayev, USSR people's deputy from trade unions, by *TRUD* correspondent O. Osipov: "Strikes: Position of Trade Unions"]

[Text] The word "strike" has quickly and firmly entered our everyday speech. No matter how much one would want this, working people both in our country and abroad do not intend to give up this form of fight for their interests. The whole point is that it should be conducted by civilized methods with the smallest possible losses both for participants in strikes themselves and for the state. The first attempt to achieve this, which was made by the USSR Supreme Soviet on 9 October 1989, when the Law "On the Procedure of Resolution of Collective Labor Disputes (Conflicts)" was adopted, did not give the expected effect. The next step has now been taken. *TRUD* correspondent O. Osipov discusses the new rules of resolution of labor disputes with S. Shalayev, USSR people's deputy from trade unions.

[Osipov] First of all, Stepan Alekseyevich, a few words about what necessitates the return to the Law on Collective Labor Disputes?

[Shalayev] As is well known, the law was adopted in 1989 under the impression of mass miners' strikes. It was adopted for the first time in our country, without sufficient experience. Life has shown that it is necessary to more efficiently determine the mechanisms of elaboration of demands during collective disputes and of their further examination and the rights of trade unions in these matters and, finally, to legislatively determine measures of responsibility for organization and participation in strikes declared illegal. This was also mentioned during a discussion of the Law on Trade Unions by the country's parliament.

[Osipov] What is the role of the USSR VKP [General Confederation of Trade Unions] and of people's deputies from trade unions in the elaboration and discussion of the new version of the law?

[Shalayev] The preparation of the draft was entrusted to the country's government so that during the first quarter of this year it may submit proposals on changes in and additions to the USSR Law "On the Procedure of Resolution of Collective Labor Disputes (Conflicts)," including in connection with the responsibility for the conduct of illegal strikes. The draft prepared by the government and submitted by the USSR President for the first reading in April contained a number of formulations and provisions unacceptable from the point of view of the USSR. Therefore, USSR people's deputy A. Yakovlev, deputy chairman of the VKP, and a number of our other deputies expressed serious remarks and proposals.

In the course of the further elaboration of the draft law in commissions and committees and at a session of the

Supreme Soviet many deputies from trade unions took an active part in the discussion.

[Osipov] Which of their proposals were taken into consideration?

[Shalayev] The report by N. Gritsenko, chairman of the Commission on Problems of Labor, Prices, and Social Policy of the Union Soviet, announced that during the further elaboration of the draft law 45 proposals and remarks were received and 34 of them were fully or partially adopted and taken into consideration.

For example, the proposal by the General Confederation of Trade Unions on establishing a mechanism of resolution of labor disputes between collectives of two enterprises and more or between trade unions and appropriate bodies of management was included in article 1.

At the suggestion of the VKP a provision to the effect that no party has the right to refuse to participate in a conciliation procedure was included in article 3. First parts of articles 4 and 5 were supplemented with specific periods for the establishment of conciliation commissions, which did not exist before, that is, for commissions, a three-day period and for a labor arbitration board, a 10-day period, which will make it possible to shorten the time of resolution of disputes.

At the suggestion of the Federative Independent Trade Union of Water Transport Workers, article 5 was also supplemented with the third part on the inclusion of people's deputies and representatives of trade unions in a labor arbitration board. On the initiative of the Federative Independent Trade Union of Water Transport Workers the entry introduced by the USSR President to the effect that a court order is final was omitted from article 9. That is, the opportunity to file an appeal was given.

Article 12 was supplemented with the following provision: "Collectives... of enterprises and organizations or trade unions, after the observance of the conciliation procedure provided for by articles 4 and 5 of this law, have the right to appeal to the USSR President, or to the USSR Prime Minister, and to top officials in republics for the protection of their legitimate rights and interests." On the demand of the VKP the law states that the administration does not have the right to make a decision on depriving workers of privileges established by the law. The entry on criminal responsibility for an illegal strike was eliminated from the first part of article 17. Some of our other proposals were also taken into consideration. In brief, deputies from trade unions sought to ensure protection for workers to the maximum possible degree and to guard them to some extent against possible negative consequences of strikes.

[Osipov] Nevertheless, quite a serious responsibility, including on the part of trade unions, was determined for the organization of strikes declared illegal.

[Shalayev] Correct. For example, article 15 states that, if an illegal strike is conducted on the initiative of the trade union, compensation for the damage is made from its funds in an amount determined by the court, but—and this is significant—with due regard for the property position of the trade union. At first the VKP insisted on an exclusion of this point. However, many deputies could not agree with the fact that trade unions bear no responsibility for the organization of such a strike. After all, then it is logical to deprive them of the right to an organization of strikes. Therefore, at the last stage of discussion this demand by the VKP was removed.

At the same time, our deputy Baranov made a proposal to legislatively determine the responsibility of the owner or the administration for the damage done to a collective if the strike is declared legal by the court, but its participants do not receive wages during the strike, or the consumption fund is reduced. This proposal received the support of the Supreme Soviet.

[Osipov] As I know, your parliamentary amendment was also examined at the meeting. What is its essence?

[Shalayev] The first part of article 13 of the draft law specified that the total and continuous length of service, the right to state social insurance, and the work place are reserved for workers participating in a strike (with the exception of those indicated in article 9). This meant that the length of service, the place of work, and social benefits are not reserved for workers drawn into illegal strikes. It is hardly fair to determine by law such sanctions against all participants in illegal strikes, who for some reasons are drawn into them, and to deprive all of them of benefits earned during many years of work, including under harmful and difficult conditions, in the North, and so forth. Especially as article 14 determines both measures of a disciplinary effect and additional measures, which can be provided for by collective contracts and agreements with respect to participants in illegal strikes. This objection was taken into consideration in the final version. It is understandable that stricter measures of responsibility provided for in article 17 will be applied to organizers of such strikes.

[Osipov] However, do provisions, which do not suit trade unions, remain in the law?

[Shalayev] On the whole, in my opinion, the law can satisfy both collectives and trade unions. Naturally, however, it will also be improved in the future by life itself. Probably, it is necessary to once again seriously think about and work on developing a mechanism of an effective, prompt, and reliable examination of disputes at the production facilities and enterprises mentioned in article 12. In order that each time there may be no need to appeal directly to the President, thought can be given to the establishment of a system of sectorial or all-Union labor arbitration boards, which should become reliable and operative and should not be established in each specific case by a special body for the examination of conflicts.

[Osipov] And last: From what moment do the new strike rules enter into force?

[Shalayev] From the day of publication.

### Costs of Labor Movement "Crisis" Assessed

914F0229A Moscow ROSSIYSKAYA GAZETA  
in Russian 7 Mar 91 p 3

[Interview with the director of the laboratory of the International Workers Movement Institute L. Gordon, by ROSSIYSKAYA GAZETA correspondent A. Yevgenyev: "The Workers Movement Will Have to Be Reckoned with: One side tries to sell its labor as dearly as possible, the other to buy it as cheaply as possible; that is the labor market"]

[Text] Five years back, a suggestion to discuss the problems of the workers movement here in this country would only have made specialists smirk crookedly. No subject for discussion within the framework of our Fatherland was observed. Today we know that there is one. Moreover, events at times unfold so quickly, unpredictably, and contradictorily that it can be extremely difficult to comprehend them. Our correspondent turned for assistance to the head of the laboratory of the International Workers Movement Institute, Doctor of History L. Gordon.

[ROSSIYSKAYA GAZETA] Leonid Abramovich, you don't see this as nonsense: let's turn toward democracy and the market and strike.

[Gordon] Market relations rest on one principle—the struggle of interests. It is this, this struggle, that ensures maximum efficiency for the market economy. In the final analysis this is natural: one side tries to sell its labor as dearly as possible, the other to buy it as cheaply as possible. That which we call political and social guarantees are not granted to laborers once and for all, they don't fall from the sky but are won in battle with entrepreneurs, who hold the power. This is how the entire civilized world lives. In this sense our workers movement, it seems to me, could help safeguard society on the road to the market from at least two dangers: the temptation to act much too rashly and hastily, shifting all burdens to the people's shoulders and as a result entering into savage, unbridled capitalism on the model of the nineteenth century; and, on the contrary, to continue to mark time warily and wind up in a few years far behind the mark where we once started off toward the market.

[ROSSIYSKAYA GAZETA] Everywhere, the trade unions defend workers' rights.

[Gordon] But you and I know what kind of defenders we have had. I'll cite just one curious example. A document signed after the summer strike of 1989 was entitled thus: "The protocol on measures taken upon agreement between the representatives of the strike (workers) committees, on the one hand, and representatives of the

USSR Council of Ministers and AUCCTU [All-Union Central Council of Trade Unions], on the other." What's this?

The miners were the first to sense the whole contradictoriness and unnaturalness of the situation. In a very short time the miners had managed not only to acquire encouraging hope but to drink the bitter cup of disappointment. In August-September 1989, on the crest of the workers movement, massive reelections were held for trade union committees in the coal industry. This was a powerful wave that pulled nearly all the old cadres out of their armchairs and sent them into retirement. It seemed there was no going back. But an amazing thing happened: literally in three or four months many of the newly elected had turned into the same kind of classic bureaucrats as their predecessors. The force of traditions persistently nudged them into the well-worn rut. The firmly put together and well-tuned system broke and overran anyone who was obstinate. That is when the coal miners started talking about an independent trade union. In order to renew the entire vertical structure at one go. For the first time it was proclaimed that the new formation would represent the interest of hired workers to counterbalance the interests of the employers, that its task was to fight for better conditions for the sale of manpower.

[ROSSIYSKAYA GAZETA] We don't seem to have ever had anything like that.

[Gordon] We haven't, no. But in the West it's the usual practice. Workers are supposed to be taken care of by their labor union. And the managers can have their own association. You'll agree it is indeed abnormal when the trade union disputes the director, who is himself a member of that union, and even of the union committee.

[ROSSIYSKAYA GAZETA] You read the miners' resolutions and you can't shake the feeling: here before you is a program of the left-radical wing. From one demand to the next: the formation of a government on a coalition basis; the depoliticization of the army and the law-keeping organs.

[Gordon] Yes, the influence of the radicals, especially the interregional deputy group, is great. B. Yeltsin, G. Popov, and N. Travkin are very popular figures. And of those deceased there is A. Sakharov.

I think that the fact that the Russian government rates so high is conditioned not least of all by the fact that it is in willing and constant contact with the miners and has managed to draw them into its work. We know that G. Yavlinskiy invited the miners in Arkhangelskoye, where the "500 Days" program was worked out.

[ROSSIYSKAYA GAZETA] The union government is also in contact with them. But that hasn't made it any more popular in the miners' eyes.

[Gordon] It drove itself into a corner. It's no secret to anyone that not one recent serious government document of ours has actually been implemented. Building castles in the air has become a favorite pastime. Therefore, when the miners put the pressure on, the terrified men of state willy-nilly promised those obstinate people mountains of gold, knowing from past experience that no one would ever ask them to follow through. But something unpredicted happened: they did! In the center and in the locales, workers committees established strict, point-by-point observance of resolution 608.

But what is the whole story with the transition to the market costing? At first the miners looked on it quite realistically. The first congress of miners in June 1990 worked out a package of demands connected with preparing the branch for market relations. It was proposed in advance to have an expert analysis done of the each mine's prospects. And not to shut down unprofitable mines immediately, but first transfer them to the property of the workers, and only then if they turned out. But the beacon swung back in the reverse direction when in October, at the second congress, Minister M. Shchadov announced to the miners that they could be saved from the market. You help me obtain 23 billion rubles (R) in subsidies, he told the delegates, and I vow there will not be one unemployed miner in the branch. The minister turned out to be much further from the market than the workers. And insofar as he had the power, he, playing his trump of the workers' opinion, dragged the entire branch behind him away from the market.

[ROSSIYSKAYA GAZETA] Nevertheless, you can't heal a sick economy with ultimatums.

[Gordon] You mean the miners are pulling the covers over themselves? That's as much a myth as the one about someone playing the miner card. Let's sort out what in the final analysis the strikers are trying to achieve. A fatter piece? Not at all. They're asking to be given the opportunity to work and earn. Take a look at the miners' demands. What comes first? The point concerning the economic independence of the mines. In this sense the metamorphosis that came about in the Kuzbass is indicative. There they began, as everywhere, with wages—"with the hooves," a differential for night shifts. But soon they clarified that as long as they were spinning around in that wheel they would remain a mere cog.

I see I haven't managed to convince you, so one more example. The congress of the movement of independent workers in Novokuznetsk in May 1990 passed an absolutely astonishing resolution. They demanded reexamination of—what do you think? Prices for agricultural equipment. So that it would be accessible to villagers. Everyone may not agree, but for me this kind of manifestation of solidarity with the peasantry is worth more than verbose literary writings and tribunal sympathies for the rural peasant.

[ROSSIYSKAYA GAZETA] Strikes, though, cost all of us dearly.

[Gordon] Yes, this act is painful for the economy. But in order to understand better what's what, let's look into figures like these. In 1989, due to strikes, and not counting interethnic conflicts, for the economy as a whole, about 2.5 million workdays were lost, whereas in industry and transport alone, 11.2 million were lost due to absences. And to what are these absences due? Motivation to work is weak. Neither the stick nor the carrot works.

[ROSSIYSKAYA GAZETA] Please, it's worth reflecting on all this a little. In history, though, much repeats. And what is going on right now in our country reminds me most of all of Poland. Wouldn't you allow that in time our own Solidarity and our own Walesa will appear?

[Gordon] Lord, how poorly informed we are! We already have our own Solidarity—the Confederation of Labor. It was created last spring at the congress in Novokuznetsk. As in Poland, this is a formation of a semi-union, semi-political type, with a broad democratic orientation. So far, it is true, the confederation yields to its Polish analog in size and strength of influence, but this has not prevented it from inciting about 300,000 miners to strike in July 1990. By the way, pay attention: just two weeks later M. Gorbachev and B. Yeltsin came to the desired agreement, concluding between them an alliance which, unfortunately, proved short-lived.

[ROSSIYSKAYA GAZETA] You see a connection between these events?

[Gordon] For me it is obvious. On the horizon appeared a force which may not have had parliamentary manners but was sufficiently powerful and had a clearly radical bent. A sober politician is obliged to take this into consideration. As for workers leaders . . .

[ROSSIYSKAYA GAZETA] Sometimes they are depicted as sort of neo-apparatchiks. No sooner did they get on their feet than they'd bureaucratized themselves.

[Gordon] There is that too. Bureaucratism is a phenomenon unrelated to class. But how can one not see that the workers movement has already discovered for us numerous original, fresh names?

Still, our "cult" past tells me: a new individual capable of rallying broad strata of society is clearly not going to appear among us anytime soon. Don't forget: ten years passed before Walesa became president.

[ROSSIYSKAYA GAZETA] If the leaders are rather weak and don't hold the reins very firmly, couldn't the chariot take off on its own? Couldn't the irritated crowd turn fanatic and set off after the first person they encounter?

[Gordon] A crowd, yes, but I'm sure not a worker organization. After all, what are we all afraid of? The fact that a poet called Russian mutiny senseless and cruel? Look here, in strikes involving hundreds of thousands of people there wasn't a grain of that kind of mutiny. On the contrary, they were marked by the highest degree of organization.

[ROSSIYSKAYA GAZETA] Right now many people are starting to talk about a crisis in the workers' movement.

[Gordon] I wouldn't say it was a crisis. Both psychological exhaustion and those flaws in the organization of the workers movement we've already spoken about have taken their toll.

But let's turn to the results of a sociological survey conducted in October at the second miners' congress. It seems to me that they give a good feel for the workers' mood. At that time 68 percent of its delegates proclaimed that the strike is an exceptional measure, but given current conditions it cannot always be avoided. To the question, "Will strikes in the USSR take on an increasingly broad scope in the near future?" 70 percent of those questioned replied "Most likely, yes." What consequences will this lead to? The sociologists asked the miners. The danger of economic catastrophe will arise, thinks nearly every third miner. But 61 percent came out firmly in favor of the fact that under the influence of strikes the course of political and economical reforms will be speeded up. One can assume that the center's frank movement to the right and its rejection of reforms will rouse this dormant volcano.

#### INTERFAX Feature Views 1990 Cooperatives

*OW0306081691 Moscow INTERFAX in English  
1830 GMT 24 May 91*

[“Soviet Economy” feature entitled “Soviet Cooperatives in 1990,” from “Business Weekly”]

[Text] At present there are several hundred thousand cooperative enterprises in the USSR. More than 240 thousand of them are members of the Union of Cooperatives of the USSR. More than 6 million 98 thousand people work in the cooperative sector and in 1990 cooperative income amounted to more than 68 million rubles.

Activity of cooperatives in 1990

Type of receipts	no of coops activity	employees (thousands)	sale (mins. rubls)
total	245,356	6,098	67,313
producers of consumer products	41,758	1,010	11,994
food and drink	4,614	44	449
trade	1,603	19	705
trade-purchase activity	5,261	52	1,858

**Activity of cooperatives in 1990 (Continued)**

Type of receipts	No of coops activity	Employees (thousands)	Sale (mns. rubs)
general supply	202	4	102
general services	27,632	420	2,888
waste processing	3,207	88	1,186
construction	75,522	2,548	25,961
research projects	4,383	125	1,061
construction projects	4,950	144	1,481
information services	3,960	77	1,735
agriculture	10,406	118	1,217
industrial equipment producers	8,904	380	5,941
passenger transport	2,039	51	400
patient services	104	2	7
sport and health services	1,723	25	185
decorators	4,755	64	470
leisure services	2,130	26	325
hotels	362	6	64
others	34,885	738	7,632

The number of cooperatives had increased by the beginning of 1991 by more than 53,000 in comparison with 1990.

The number of active cooperatives on January 1, 1991 amounted to 81% of the number of those registered (on January 1, 1990 this number was 78%).

The average monthly wage in the cooperative sector topped 416 rubles.

### **Strikes Hit Start of Lena River Shipping Season**

*PM0406151591 Moscow Central Television First Program Network in Russian 1800 GMT 30 May 91*

[From the "Vremya" newscast: Report by V. Stepanov, identified by caption]

[Text] [Announcer] State leaders at various levels have repeatedly expressed the idea that the chronic delays in adopting important decisions are the cause of major miscalculations and errors in both the strategy and tactics of economic development—incidentally, this idea surfaced again in Kazakhstan today. And they have repeatedly argued against attempts to revive the discredited administrative command system of running the economy. This is confirmed in practice.

The Lena shipping season has begun with a warning strike which is threatening to escalate into a real one. You would think that the previous months of the impressive strike movement should have taught the administration that it was necessary to react quickly, and that waiting for things to work themselves out is a costly business. But...

[Stepanov] The 1991 shipping season has begun on an alarming note. The port is empty and, if there are workers here today, they are not here to work but to ask for their demands to be met. What are those demands?

[Ship's Captain N.N. Trubitsyn, chairman of the strike committee—identified by caption] We are demanding that our pay be doubled. That is the main demand. It arose after the government raised food prices. We worked out our situation and came to the conclusion that we are paupers. The pay all goes on food.

[Stepanov] Generally speaking, there was time to resolve these issues before the shipping season began.

[Trubitsyn] These issues were raised in April.

[Stepanov] But it seems to me that this needs to be resolved at a higher level.

[Trubitsyn] We sent a letter to the RSFSR [Russian Soviet Federated Socialist Republic] Council of Ministers. We had no reply to the first letter. We sent a second letter; we only received a notification that our letters were received.

[Stepanov] So there has been no reaction.

[Trubitsyn] We have not yet seen a reaction. I believe that, unless the issues are resolved, we will have to resort to the extreme measure and stop work, although we prefer not to.

[Stepanov] On the day of arrival of the first ships, the dockers staged a warning action. The ships had to spend a whole day at the quayside and in the roadsteads. The cost of this is about 120,000 rubles. It is possible to understand such a decisive action by the dockers. The

main demand is pay, but the whole range of problems includes housing and social and cultural amenities. This has been known for more than just a day, so to speak. Nonetheless, following bad practice, things have reached a critical point—that is the situation where the shipping season has started and it is not only days but hours that count.

### **Chemical Industry Workers' Grievances Reported 914F0228A Moscow TRUD in Russian 25 May 91 p 2**

[Article by N. Grineva: "People Who Were Guilty Only in the Choice of Their Vocation Found Themselves Beyond the Limit of Risk"]

**[Text] More than 70 percent of chemical industry workers are employed at production facilities with harmful and especially harmful working conditions.**

Among workers of all branches of industry, chemical and oil-refining industry workers were in 15th place in wage level in 1980, in 25th place in 1985, and in 31st place in 1991. For information: the wage level of this branch is in first place in the FRG, in third place in France and Great Britain, and in second to fourth place in the U.S.

During the first four months of this year as a whole, the output of products fell at almost 60 percent of all enterprises. The shortfall of output destined for the national economy was two billion rubles' worth.

I do not think that Chairman of the All-Union Federation of Trade-Union Workers of the Chemical Industry V. Borodin was showing off at the press conference which was held by the trade union, together with ministries and agencies of the chemical complex, when he said that the branch requires fond attention. But he was sternly avenging neglect. Many examples of it which have appeared were cited.

Working conditions have worsened, injuries are increasing, work is often being performed beyond the limits of permissible risk. It is not surprising that last year alone the chemical workers "lost" more than 65,000 people, who left for other branches and for cooperatives. Each year the failure to supply chemical production facilities with raw and other materials, especially imports, is rising. Production volume is dropping. The number of losing and low-profit enterprises multiplies. Social tensions are coming to a head in working collectives.

Answering one of the questions, Deputy Chairman of the USSR Council of Ministers V. Gusev said:

"It must be said today that a package of laws opens up possibilities for wages in cooperatives to increase. But experience has already shown that the rules of the game should be equal. If the state will not pay higher for work at its enterprises than do the enterprises of other forms of ownership, nothing good will happen for us. Incidentally, foreign experience confirms this, so stability of

position and a higher wage distinguish a state enterprise from a private enterprise. We shall try to do precisely that."

Yes, with all the diversity of questions, the problem of wages for people who are risking their health each second and do not get appropriate compensation for it has remained pivotal. By the way, there is tension also with other vital benefits.

Let some figures illustrate this sad thought. At chemical-complex enterprises there is a shortage of 15,000 places in workers' dining rooms, and polyclinic capacity and hospital capacity are, respectively, 66 and 59 percent. Chemical-complex enterprises have on their books 600,000 square meters of dilapidated or damaged housing. Preschoolers' institutions are short 70,000 places. Let us stop for the present. And let us ponder at least for a minute about how a person can work and live, a person for whom, behind these dry data, there is a form of life, more truly—of existence.

Here is one thing that was said:

N. Khrripunov, general director of the Voskresensk's NPO "Minudobreniye" [Science and Production Association for Mineral Fertilizers]:

"When you speak with any worker, he does not accept the word 'ownership' as an economic category but only as his wage, the capability to support his family. Let us take a look at the wage in small and joint enterprises and in cooperatives—the difference with our workers is too great. And the worst thing for us is that all the forms of wage increases are closed for us."

Yes, the possibilities for increasing wages through use of the industry's internal reserves are limited. In the first place, the bulk of the workers are temporaries. And this source has practically been exhausted with reduction in the size of the work force, since the process of intensifying the chemical workers' labor has reached the maximum level.

Moreover, certain government decisions, in accordance with which the wide introduction of new and progressive forms of management has been slowed, fixed prices for the chemists' finished output have been set (at a time when prices for raw and other source materials are practically free), and the level of profitability has been restricted, have limited the increase in earnings.

Naturally, the question also about the role of the industry's trade union in solving the accumulating problems cannot help but come up.

"By means of a dialog with the government," said V. Borodin, "we have been able to resolve a number of social questions: about the right for the additional release of workers employed at underground workings at mining-and-chemical enterprises; about allocations of funds for additional benefits for those who were disabled at chemical enterprises during the years of the Great Patriotic War; and the lists of preferential pension provisioning have been expanded. The conclusion of an agreement between the government and the industry's trade union which guarantees minimal wage rates for all

categories of workers and a minimal level of supplementary payments should be one of the practical actions. We have managed to move up the first period of its conclusion—the second half of this year, but not for the start of next year, as had been proposed. It is very important here to work out a correct fundamental approach on a number of policies for concluding wage-rate agreements. We are studying the experience of the FRG and Finland. Right now the document is at the refinement stage.

"Simultaneously, a compromise solution of the question, with the original version of which we did not agree, should be found within a few days. This refers to the five-percent increase in the consumption fund for increasing production volume by one percent over the base amount which was established by an Order of the President. Indeed, given the current depressed state of affairs in our industry, this is one superpercent—a bird in the sky."

The question about a strike in the industry, as it is called, is hovering in the sky. On the one hand, it is clear that there are many reasons for chemical and oil-refinery workers to make demands. And on the other... Here branch officials are grabbing and closing the damper, they are cutting the delivery of fuel, let us say, for aircraft—and aviation "has stopped working," and neither the dispatchers nor the pilots must strike. But at present the conscientiousness of the workers "holds up" the situation.

One after the other, the news gets worse. Production has stopped at Berezniki and Sterlitamak. The Bor plant is barely staying afloat. There is a fire at Nizhnekamsk and accidents at Angarsk and Sumgait. How many more plants in the country can still "chemicalize" with chemical workers?

#### Cabinet Aids Aviation Workers, Students

914F0225A Moscow RABOCHAYA TRIBUNA  
in Russian 22 May 91 p 1

[Unattributed report: "In the USSR Cabinet of Ministers"]

[Text] In order to insure the stable functioning of the country's air transport and flight safety, the USSR Cabinet of Ministers has issued a decree in which additional measures are set forth to provide incentive for productive labor and improved working conditions at enterprises of the USSR Ministry of Civil Aviation.

The ministry has been given the right to increase by an average of 40 percent the amount of funding allocated to departmental enterprises for consumption, proceeding from the need to bring wages into line with working conditions and in order to staff enterprises.

With the participation of the trade unions the ministry has been assigned the task of drawing up recommendations on use of the additional funding for wages for the various categories of workers, making provision here for an average increase of 50 percent for workers who are employed in air traffic control, and for air crews.

The USSR Ministry of Labor and Social Problems and the USSR Ministry of Civil Aviation have been assigned to submit to the USSR Cabinet of Ministers proposals on additions to the No. 1 list of production facilities, work, professions, and posts that are particularly harmful and entail particularly difficult working conditions, in which employment gives the right to pension on favorable terms, and of professions of workers who are employed in air traffic control zones, centers, and sectors with the heaviest and most complicated traffic patterns and who are certified controllers.

The USSR Ministry of Labor and Social Problems has been instructed to include workers who are employed in air traffic control on the list, giving them the right to additional leave time and a shorter work day. Provision is made to set the duration of additional leave for these workers at up to 33 working days, and the work week at 36 hours.

\* \* \*

The USSR Cabinet of Ministers recently reviewed a number of questions relating to further expanding social guarantees for young students and issued decrees entitled "On Grants for Individual Categories of Young Students" and "On Additional Measures To Provide Material Support for Young Students in Connection With the Retail Price Reform."

The USSR State Committee for Public Education has adopted resolutions on increasing the size of grants in higher educational institutions and establishing grants for successful students in the amount of 150 rubles [R] per month; for students receiving grades of only good and outstanding the amount will be R170, and for students receiving all outstanding grades, R190.

The norms for spending on food in residential colleges and other educational institutions of Union subordination have been tripled.

Certain other measures are also envisaged in the resolutions.

## CIVIL AVIATION

**Brest Airport Becoming International**

*LD2105174591 Minsk Radio Minsk Network  
in Belorussian 0300 GMT 21 May 91*

[Summary] The Brest airport is becoming international. Its controllers are now learning English. The technical preparations of the Brest airport for international flights have been highly appraised by central Union supervision bodies. It is planned to develop at the beginning freight flights, which are more profitable. Proposals have been already received from Holland and Sweden for primarily freight flights. When the official status of an international airport is granted to Brest, it will be ready for various proposals from European countries.

**Largest Amphibious Aircraft Built in Taganrog**

*91P502094 Moscow TRUD in Russian 4 Jun 91 p 1*

[Article by B. Kurtser: "Albatros' Is no Longer a Secret"]

[Text] The first large amphibious airplane has been created in Taganrog. In the beginning of June it will appear at the Paris international air show.

Gennadiy Panatov, chief designer at the Taganrog Aviation Scientific-Technical Complex imeni G.M. Beriyev, relates:

"The news that the child of the Taganrog people will be demonstrated at the air show in Le Bourget quickly spread through the collective. This is an event for the whole city. Earlier a shroud of secrecy completely covered what the designers were doing, although the people knew: they are building an amphibious plane here."

G. Panatov's office contains models of all the planes developed in the design bureau, including the "Albatros," under the code name (as we say) A-40. Its length is 40 meters, the same as its wing spread. The "Albatros" can be used for search and rescue missions, when ships or submarines are in trouble, or when cosmonauts have to make a water landing. It can carry 60 people on board. Its low take-off and landing speed allows the plane to be set down on high waves or on ice. The amphibian will also specialize as a firefighting machine. It pours on 300 tons of a firefighting foam mixture and can be filled up with water in minutes.

Is there an analog in the world? If one talks about firefighting planes, they have them in Canada. It must be said that today that country has a monopoly on the production of such airplanes. But it sells flying apparatus developed in 1960 for a price of \$17 million. Why don't we engage in such a profitable business? Well, we already have foreign orders for 300 "Albatroses."

## RAIL SYSTEMS

**New Transport Minister on Relationship With Rail Ministry**

*914H01694 Moscow GUDOK in Russian 8 May 91 p 2*

[Interview with Nigmatzhan Kabatayevich Isingarin Kazakh SSR Minister of Transport, by M. Ustyugov]

[Text] For Kazakhstan's transport workers, the spring was filled with important changes. The ukase of the republic's president about appointing N. Isingarin, the chief of the Alma-Ata Railroad, minister of transport came out at the beginning of March. An agreement between the Ministry of Railways and Kazakhstan's government was signed in Moscow at the end of that same month. Today, N. Isingarin, Kazakh SSR minister of transport and candidate of economic sciences answers our questions.

[Ustyugov] Nigmatzhan Kabatayevich, the agreement signed between Kazakhstan and the Ministry of Railways was somewhat of a surprise even for transport workers. That is why many questions immediately arose. One of them: Are they preparing similar agreements between the union ministry and the other republics?

[Isingarin] As far as I know, no. There was an attempt to prepare such a document with the Baltic republics; however, it was not crowned with success: the positions of their governments and the Ministry of Railways were too different. We traveled a path of reasonable compromises in order to achieve a constructive result. This approach completely corresponds to the present political position of Kazakhstan's leaders.

I am convinced that it is impossible to realize the idea of the republic's true sovereignty by entering into confrontation with the center. The move to sovereignty should be realistic and progressive. One must point out that the ministry met us half way on a number of important questions, that is, the movement toward agreement was not one-sided.

[Ustyugov] Specifically, what steps did the center take to meet you?

[Isingarin] In accordance with the agreement, the republic now actively participates in planning shipments and the Ministry of Railways working with Kazakhstan's government provides for the social protection of railroad workers, their family members, veterans, retirees, and students. The ministry and the republic allocate funds for the delivery of various commodity material valuables for the social area—medicine, trade and preschool and educational institutions. The worker supply departments are being given centralized funds for food and industrial products and equipment and production lines to establish a network of small enterprises to produce consumer goods and process subsidiary farm products.

The procedure for appointing the chiefs of railroads is being changed substantially: whereas the union government did this previously in accordance with a recommendation from the Ministry of Railways, the recommendation will now be a joint one involving the Ministry of Railways and the republic's government. Thus, Kazakhstan will cease being a passive party with whom personnel matters are only coordinated.

[Ustyugov] Why is such an important question as ownership not in the agreement. To whom do the railroads belong—the republic, as the declaration on the state sovereignty of Kazakhstan says, or is it all-union ownership, that is, the center?

[Isingarin] We intentionally avoided controversial questions of this type. The new union treaty should introduce clarity into them. That is why it is not worthwhile to regard the agreement's text as something firm. It is quite possible that it will require serious adjustments by the end of the year.

[Ustyugov] As is known, the Ministry of Railways today collects and hands over taxes from the railroads to the union budget. I remember that it was you, Nigmatzhan Kabatayevich, who repeatedly suggested that this mechanism be reviewed in light of the changing political and economic situation. In particular, it was suggested that the republic's Ministry of Finance pay for all enterprises located on Kazakhstan's territory, including the railroads, from the union till. However, this change has not been put into the agreement.

[Isingarin] In 1991, the union tax from the railroads will be transferred through the Ministry of Railways. In the future, again the union treaty will determine the procedure for this.

[Ustyugov] The Ministry of Railways introduced local tariff rates at the beginning of this year. In fact, this means that the leadership of one railroad has the right to establish its own increased contract tariff for shipments within it. You have suggested that the limits of this rule be expanded: to expand contract prices for the republic as a whole. Were these ideas reflected in the agreement?

[Isingarin] The document points out that the Ministry of Railways and the republic's government should provide for developing and introducing proposals about establishing a single local service and coordinated tariff for freight shipments within the limits of the Alma-Ata, West Kazakhstan and Tselina railroads. A work group composed of representatives from the three mainlines and the center will be formed to do this. A single tariff is primarily stipulated from an economic viewpoint. Within the republic, 70 percent of all freight is shipped on our railroads. Picture this: if I dispatch freight within the limits of one mainline, let us assume, for a distance of 500 kilometers, then, according to the local tariff rate this will cost me more than a shipment to 2,000 kilometers but with a "stopping in" on a neighboring railroad. You see, if you stop in on neighbors along the way—you will not find yourself in the category of local service and

this means that the contract tariff is not applicable to you. You see, this is absurd.

[Ustyugov] In general, there are quite a few different types of discrepancies in the economics of our transport complex. Take only the strict dependence of the railroads' material condition on the purely gross expenditure indicator—shipping volume. During recent years, this volume has sharply declined because of the slump in production and the severance of old economic ties. Are the railroad workers, however, guilty? Or how should the railroads be self-financed in this case?

[Isingarin] Two years ago when everyone approved the practice of self-financing, I said that it would not provide the necessary effect on the mainlines. There are only two versions of the economic model. In the first one, the railroads are state ones and their workers are state employees to whom state economic and social protection is guaranteed, that is, no matter how much shipments fall and no matter how feverish traffic is because of extremists cutting off the routes—the pay and real income of the railroad workers remain stable. In the second version, the railroads are independent cost-accounting enterprises possessing the right to establish their own tariffs which insure the necessary level of profitability. There is no third version.

[Ustyugov] You agree, however, that it is dangerous today to give the railroads complete freedom to establish prices. This can lead to an increase in the transport expenditures of producers—production costs will grow and this means that prices will increase. As a result, there will be a new inflation spiral and a rise in the cost of living after which the transport workers will again have to increase tariffs for their social protection—the circle will be closed.

[Isingarin] Without a doubt, a common tariff policy proceeding from the concept of a single economic space and a single market is required today. Kazakhstan recognizes that the center will carry out this policy. However, the shipping plan can only be an indicator one, that is, devoid of a directive nature, and a forecast one based on calculations. One can determine, let us assume, the number of passengers, the volume of shipments and the approximate product list of freight but it is senseless to drive the railroads on under these indicators.

[Ustyugov] You are a supporter of state railroads and, at the same time, you encourage independence. Is there not a contradiction here?

[Isingarin] No, the railroad complex has a base that is not subject to privatization—in any case, it must remain a state one for the near future. No one has a right, let us assume, to organize "private" passenger traffic or permit a "private" freight consist on our railroads. However, why shouldn't we organize a lease enterprise or a private firm which would conclude a contract with us for track repairs? Why shouldn't a railroad terminal be made joint-stock property and why shouldn't it be transferred to private hands under strictly stipulated conditions?

[Ustyugov] Probably, it is possible to find the solution to a very painful problem in this—reducing railroad workers and employees with the drop in shipping volume?

[Isingarin] Of course. It is necessary to expand without delay the economic and entrepreneurial area of the railroads. Work will be found for all then. Today, it is important for us, on the one hand, not to allow a parasitic attitude and, on the other hand, to preserve the basic contingent of the workers. I hope that the economic situation in the country will change in a year or two. An increase in production, an acceleration in production rates and a rise in the amount of construction will inevitably provide a great deal of work for railroad workers. In the new situation, who will carry the growing stream of freight if we begin to drive personnel away today? Why shouldn't we reorient people to the service area? Why shouldn't we find for each one work that he likes? There is another avenue: Keep in reserve people who have retired but who are still fully capable of working. One can establish, for example, an ardent reserve of locomotive crews for this purpose and provide every one in this reserve an opportunity to make a trip once a month.

[Ustyugov] What will be the staff of the new ministry?

[Isingarin] I am still alone as minister. We are now solving the problem of premises and we will determine the personnel structure.

The ministry staff will have approximately 60 people. This is not very many if one considers that during the last two years the administrations of the republic's railroads were reduced by more than 200 workers.

[Ustyugov] You are a specialist on railroads. You will probably have deputies for civil aviation, river transport...

[Isingarin] No, we will immediately depart from such a branch structure. The railroads and civil aviation are independent enterprises in whose production and economic activity we will not interfere. The ministry has different functions: the coordination of the transport complex's work; state regulation; the realization of the republic's authority to manage rail, air, and sea transport; the development of bills on appropriate subjects; and the preparation of forecasts.

However, recurrences of the old approach are being felt. Recently, for example, I received a letter in which they demanded that the work to turn in scrap metal be strengthened. Let us explain that this is not our function. One must address the administration of the railroads and the Kazavtotrans concern directly. Not as many technical specialists, who thoroughly know production fine points, as lawyers, economists, and people, who possess a system's way of thinking, will become ministry workers.

In this connection, new and still unusual structures will appear in the ministry. A transport inspectorate will be organized to monitor the implementation of legislation and the licensing of shipping, transport, forwarding, and other activity in the republic. I will name the ministry departments: coordination and regulation of shipments, foreign economic ties, financial and economic analysis and structural forms, scientific and technical policy, etc.

[Ustyugov] Nigmatzhan Kabatayevich, it still is unclear: Will there be a new chief of the Alma-Ata Railroad, and will the chief of the Kazakh Civil Aviation Administration be subordinate to you as minister?

[Isingarin] No. The leaders of the railroads and aviation will be members of our ministry's collegium. However, I repeat, we are not talking about administrative subordination but about voluntary compliance, cooperation and collaboration between the representatives of the different types of transport. If you wish, our new thinking on the problem of sovereignty is also included in this. One can strive for separation and the severance of the ties and threads that have connected the republics for decades. However, one can solve controversial problems together—by means of negotiations, the division of rights and the conclusion of agreements. Our transport today is a cart-load of problems. One can drag this cart in different directions like the heroes of the well known fable. However, we can "harness ourselves" to it and together push it from a standstill.

#### Dnepr Railroad Chief on Change to Market Economy

914H01744 Moscow GUDOK in Russian  
24 May 91 p 2

[Interview with R. Yevdokimenko, chief of the Dnepr Railroad, by S. Zhuzhgin, GUDOK correspondent: "Do Not Permit Unemployment"; Dnepropetrovsk.]

[Text] In an interview with our correspondent, R. Yevdokimenko, chief of the Dnepr Railroad, speaks of the difficulties of the transition of railroad transport to the market.

[Zhuzhgin] Ruslan Yakovlevich, on the eve of our interview, I visited several collectives. There is a sense of unease everywhere. For example, the track workers of the Novoalekseyevka Machine Station have no guarantees against a repetition of last year's idle times, which lasted for many months, and were due to a lack of materials for the permanent way. The threat of unemployment hung over the locomotive depots, particularly in freight traffic. In Nizhnedneprovsk-Uzlovsk alone, over 30 electric locomotives proved to be "under the fence." The brigades were standing in line for the opportunity of operating the next train. The workers of the Dnepropetrovsk Railcar Depot are also in a complicated situation, because of the lack of prospects for the development of the enterprise.

[Yevdokimenko] Foreseeing the objective difficulties in the transition to the market, last year we created the necessary stockpile of work in progress on the road. By fulfilling the basic volume of freight and passenger transport, we made a profit, which we will use for social development and reinforcement of the material-technical base. We moved the line for housing up faster than had been outlined: not counting the debts to the State authorities, we turned over 815 apartments and also found money to raise wages. I will briefly explain how difficult this was.

Last year the total volume of freight dispatch was reduced by 8,405,000 tons. Of them, three and a quarter million of iron ore raw material were underloaded: the enterprises using it were working poorly, and purchases in a number of Eastern European countries were reduced. We had no funds for mutual settlement for the things for which we were willing to maintain the former amounts of import. The railroad workers naturally did not count on a considerable share of revenues in this case. But then, at the same time, wholesale prices jumped, and with them—operating costs. At that time, however, we got out of the difficult situation due to active subsidiary-auxiliary activity, where we managed to cover the rough planned outlines by 21.8 percent. Because of the reduction in transport volume, we began to make stiffer demands of the clientele: you violated the terms of the contract—kindly pay the fine. In the complicated financial situation, we were permitted to leave these funds in the road budget.

[Zhuzhgin] In other words, despite the difficulties, the mainline finished last year successfully. How about this year?

[Yevdokimenko] Well, according to the results of the work in the most difficult, fourth quarter, the collective won the challenge banner. Today however, I will say straight out, there are no sufficient grounds for optimism. The behavior of our leading transport purchasers is unpredictable. In the first quarter we transported 6,105,000 tons less than in the same period last year. This alarming trend is being maintained. So far, we cannot count on any considerable increase in the freight flow, and that means, in revenues. On the other hand, expenses are steadily growing. Deductions for the budget have increased. Additional taxation and the total withholdings for the stabilization fund have appeared. Wholesale prices for materials, equipment, rolling stock and services changed. Accordingly, we now have to pay higher amortization deductions for super-expensive railcars and locomotives.

[Zhuzhgin] But higher tariffs were introduced for freight and passenger transport—were the additional funds obtained from them not really enough to cover our financial gaps?

[Yevdokimenko] Unfortunately not. After making all the recomputations, including the additional payment of compensation because of the introduction of new retail

prices throughout the country, the gap between revenues and expenditures in the road budget remains two million rubles [R]. The question arises: where can we get the funds to raise the wages of the railroad workers and finance the programs of mainline re-equipment? The rolling stock needs updating: 10 percent of the passenger cars and 40 percent of the locomotives have outlived their service life and are due for replacement.

[Zhuzhgin] Does this mean that difficulties are also arising with respect to housing construction?

[Yevdokimenko] The housing program is short of money too.

[Zhuzhgin] Does this not indicate that we are going up a blind alley at the very start of the transition to market relations?

[Yevdokimenko] I think that such a categorical conclusion is premature. We must more actively seek a way to increase revenues in all directions. It is the market relations that are driving us to deal with this, above all, to adhere to a rigid regime of economy, expand services to enterprises, passengers and the people and increase consumer goods production. Widescale use of reconditioned parts and units when repairing rolling stock will yield a good effect. In conjunction with the Kiev Institute imeni Paton, we have developed the technology for reconditioning automatic couplings, coupler yokes, spring-mounted beams and other rolling stock parts. Given the shortage of wood, our railcar depots have managed to organize the modernization of flatcars, making more reliable wood-metal floors from old materials. This experiment was commended with a ministry first prize.

There are also new potentials in commercial activity. We intend to make wide use of contractual tariffs. The rates for contractual fees and price-setting for 16 types of services have already been worked out and are partially in effect, when enterprises and organizations are interested in rush and other types of transport not specified by the monthly plans, in forwarding freight, loading-unloading operations and the additional operations involved in them. True, contractual tariffs were subject to criticism recently, particularly in discussing the Law on Railroad Transport. You would think the railroad workers are trying to "make money" out of air. This is conjecture from the arsenal in which everything was formerly planned and distributed from the center. Practical experience, however, dictates other approaches. For example, it has been directed toward any sort of organization of freight. If the freight cannot be immediately accepted, to transfer it to some sort of warehouse makes unnecessary work. Through contractual price-setting, though, not through punitive sanctions, as has been the accepted practice in our country, the road offers the possibility of using refrigerated sections with mutual advantages, especially in mid-season.

Another example. At the Krivbass they take quartzite from the quarry to dump heaps, involving large trucks in

this "throw-away" work. The railroad workers, however, could have loaded it up and delivered it to any interested farm to discharge onto the vehicle roads. This is, instantly, a broad field for contractual, economic relations.

An active search is now being carried out in these directions. A specialized department has been set up, the task of which is to draw currency to the railroad. Industrial enterprises have the opportunity of manufacturing something according to orders from foreign partners, and we render the service of delivering the goods. We intend to obtain certain economic advantages from setting up a network of small enterprises, although there are so far some difficulties with this process because of the vacillating legislative basis.

We have succeeded in reaching an agreement with Dneproenergo on the inapplicability of sanctions for the short supply-oversupply of electric power for train traction, which will make it possible to save about R6 million. We are gradually getting away from large subsidies to maintain housing, through privatizing it. Sixty apartments worth a total of R240,000 have already been sold to the families of railroad workers for the residual cost. Here, it would have been a useful incentive to introduce a system of sectorial benefits, right up to transferring the housing free of charge. In this way, it would have been possible to avoid the mainline's yearly expenditures of about R8.5 million for capital repair alone. The owners of the apartments would take care of their maintenance themselves.

[Zhuzhgin] It is no secret that in railroad transport, as before, the famous expense mechanism is alive and well. Our administrative structures alone cost who knows how much.

[Yevdokimenko] For this there must be radical changes, but the sectorial staff is so far in no hurry to make them. We must examine things more thoroughly and get rid of the multi-member hierarchy of directors and specialist-guardians. For this, the enterprises must find genuine independence, and leave the operations-administrative functions and the group of problems on financial and commercial relations between the enterprises to the road divisions. You cannot out carry out this sort of reorganization on the strength of sectorial specifics within the limits of a single road, however. Therefore, realizing the great significance of the problem, we are approaching it cautiously.

[Zhuzhgin] Nevertheless, on the road level too, the new Law on Railroad Transport opens up possibilities for an independent solution to many problems.

[Yevdokimenko] We are realizing these possibilities. We have already begun the process of rejuvenating the managerial personnel, and have created a reliable reserve of specialists under the age of thirty. Their work and advancement is being paid particular attention. Along with this, we are continuing to reduce the administrative-managerial personnel and the expenses to maintain

it. The number of staff workers in the administration and road divisions will be reduced by 160 persons, and at line enterprises—by 20 percent.

[Zhuzhgin] In relation to this, I cannot help but ask a delicate question, pertaining personally to you as a director. You concluded a contract with the Ministry of Railways for a period of three years. This document set forth in detail the obligations of the parties. You are faced with great tasks. In order to cope with them, you must have a team of specialists, meeting today's requirements, in all administrative units. You took over as head of the road a little over a year ago. You "inherited" your deputies and your division chiefs. You probably also have to conclude contracts with them, even though some of them have been working all their life in the public eye. According to the former standards, they coped well with their jobs, but under the new conditions there are different requirements.

[Yevdokimenko] According to the staff schedule, determined by the Ministry of Railways, the road chief has six "upright" deputies. This is, perhaps, not many for a 100,000-member collective. Given the general cutback in the administrative staff, however, it is unjustified to maintain such a large number of deputies. We are now working out variants of combining functions and eliminating parallelism in work. We have sent our proposals to the Ministry of Railways, for after all, this is the minister's schedule of appointments. The directors of the division unit are to be brought up to date.

[Zhuzhgin] How real is unemployment for the railroad workers of the Dnepr Railroad, in connection with the reduction in the transport volumes of freight, and indeed, passengers too?

[Yevdokimenko] I think there should be no unemployment as such. The drop in the freight transport volumes was caused, on the one hand, by the wave of miners' strikes and the consequent reduction in the production level in metallurgy and machine building. On the other hand, the disruptions in relations between the sectors and regions had their effect. These crisis phenomena are finally ending. Therefore, it is now important to maintain the skeleton of worker and specialist personnel. It goes without saying, the new economic relations entail a reduction in the number of certain worker categories. Here, though, the administration and our social organizations should think about changing and combining their occupations. A set of stabilization measures should be in operation in the sector. I have in mind the skillful use of tariffs and other measures that will make it possible to earn funds without curtailing the basic activity of transport. You probably cannot get by without some sort of subsidies and investments on the part of the State, if we are going into a system of all-State property. We have simply no other way over the still shaky bridge to the market.

**Deputy Rail Minister Interviewed on Personnel Issues**

914H0172B Moscow GUDOK in Russian  
21 May 91 pp 1-2

[Interview with B. Nikiforov, USSR deputy minister of Railways, by I. Taburyanskaya: "Everyone Should Take an Interest"]

[Text] B. Nikiforov, USSR deputy minister of Railways, feels that a very important factor in stabilizing the transport economy and the entire transport process is creating good work conditions for people. The interview with him, offered for the readers' attention, is devoted to this topic.

[Taburyanskaya] Boris Danilovich, I should like to begin our conversation on the state of affairs in the sector with a statement of the facts, perhaps not a cheerful one, but nevertheless, real. Railroad transport, which has always been characterized by stability and, despite everything, fulfilled all its orders, has lately been losing its former position. The extreme situations on a number of roads, particularly on the southern route, the drop in transport volume and the demands to rescind disciplinary regulations and remove bans on striking—these and other realities, you will agree, even in the recent past were unthinkable for the railroads. Why is all this happening, and was this present situation not foreseen?

[Nikiforov] Indeed, the instability on the railroad is akin to death. We are now subsisting under worse conditions, and our idea of perestroika and its results today is considerably different from the way it was viewed just five years ago. No matter how much you talk about policy, though, it seems to me that one of the main reasons for the crisis has been the process of depreciating labor. Moral stimuli for it have, little by little, been lost during these years, and there are not yet any worthy material ones. This process is being intensified. Various types of speculative activity have been virtually legitimized, and the justified motto, "He who does no work, does not eat," which used to define the essence of our life, loses its meaning with each day. People are going from state enterprises to joint ventures and cooperatives, and it is not that seldom that you hear it said that honest, conscientious work for wages is the destiny of failures. All of this, which is taking place on a countrywide scale, of course affects transport as well. That is why it is very important now to place before oneself real, vital goals, convince people of the truth of them, and of the need to start working. Only if they really believe that without work there will be no worthy life, only then can a way be found out of this crisis.

[Taburyanskaya] Incidentally, there is a somewhat paradoxical situation in transport right now with respect to wages: in some places, at typing establishments they are getting up to 250 rubles, while the wages, for example, of a railcar repair fitter, are 300-350. You will agree that this is a clear disproportion. I am not claiming that the typists should be paid less, but the fitters, machine

operators and engineers should receive considerably more, in accordance with the labor expended.

[Nikiforov] Yes, this is a problem. Fortunately, almost no one today denies that work should be a source of material incentive and well-being, not according to the minimum, but according to the maximum. We must attract people with creativity and learn to pay for it lavishly. Scientists, inventors and efficiency experts—these people are movers of progress, and all the conditions for this should be created for them. Work is hard, dirty, routine (and in the repair of rolling stock, for example, it constitutes almost two-thirds of the total expenditure), and should be ennobled and well paid, although we should try our hardest to reduce the proportion of this type of work. In short, the correct evaluation of the labor should guarantee the worker and his family the good things necessary for life.

[Taburyanskaya] All this is very interesting, but so far, the matter is not going beyond good intentions. After all, in order to improve wages, conditions and people's attitude toward work, you need not only money, but a new principle for organizing the work of the collective.

[Nikiforov] I will talk about that. Turning to the experience of the Americans, and looking at them, not as ideological adversaries, but as partners, from whom there is something to learn, I can see that they long ago armed themselves with many principles, the idea of which we should utilize in our country. The main one of them is that, if a firm needs an engineer or worker, it creates all the conditions to keep him from leaving.

Can this experience be used in our country? I think that it can. In each transport subsector, for each occupation and specifically for each region, we should determine the subsistence and desired level of material welfare for the people, and establish wages on this basis. Every worker should have a clear idea of what he must do so that the enterprise will make a profit and he will receive a personal reward.

The main thing is that part of the funds earned be returned to the collective and invested in the construction of housing, kindergartens and health and physical culture complexes. I am very impressed by the evaluation of labor used in the United States. It is based on individualizing wages and increasing them on the basis of personal achievements. A flexible system of remuneration is widespread there. In it, the variable part of the wages considerably exceeds the salary. In other words, a creative person should know: if he submits and puts into effect a sensible suggestion, he receives a sizable part of the profit.

An analogous experience is being utilized at the Mytishchi Machine Building Plant, which produces subway cars. Here, a one-time award is paid for initiative in developing and introducing new equipment, technology and production organization. The authors of the innovation receive up to 30 percent of the profit obtained, including hard currency.

[Taburyanskaya] You and the management of the Locomotive Main Administration recently met with representatives of the locomotive services of the roads and repair plants, and with depot workers. At this meeting, there was probably also a discussion of how to work under the new conditions and how to pay for the labor of the repair brigades?

[Nikiforov] Rolling stock repair is the rear guard, the foundation of transport. The situation here is very complicated right now. In fact, it consists of updating equipment which has outlived its service life, was lagging behind even before, and has now become completely out-of-date, because of the disruptions in the material-technical supply system throughout the entire country. Once in a while, though, you hear the opinion that expenditures for repair are expenditures that do not benefit the enterprise, the role of which is played by the road division. A depot, in doing repairs, is ostensibly doing it for someone else's uncle. Therefore, the financing is arranged so as to cut down on repair work that should not be permitted in any event. Another thing, the actual system of organizing and paying for repairs should be revised.

As for financing, we suggest the following system and would very much like to hear responses from the sites as to how acceptable it is. It can be based on allotments by the road, through the service, of funds directly for the depot, through amortization deductions for the rolling stock. The depot takes the normatives to the locomotive brigades and repair shops under contracting conditions. In this case, a system of bonus payments is introduced from the funds saved, depending on the quality of the repair.

The list of repair operations is approved by the MPS [Ministry of Railways], but the depot can amend or supplement it, on the basis of local conditions. The division no longer has the right to be in command of the economics of repair, just as is true of subsidiary-auxiliary activity. The depot can create joint ventures and small enterprises and associations, which will yield revenues and have a direct or indirect effect on increasing the volume and improving the quality of the repair. The division establishes cost-accounting relations between the transport department and the locomotive depot.

In a word, the repair workers must be given the possibility of earning, and at the same time made strictly responsible for the quality. For example, the wages can be based on the minimum, and all the rest can depend on how the repair is done. This is a good method of stimulation, and this system must be developed.

[Taburyanskaya] But where can you get the funds, when in fact all you really hear about right now are complete and utter deficits?

[Nikiforov] This question is the topic of the day. Railroad transport, in my opinion, has many untapped sources of additional wages. Let us take, for example, repair. The entire process of reconditioning parts must

be activated. In the first place, right now there are simply no funds to purchase many units, including from abroad, as there were earlier. Self-supply and setting up the production of the parts needed within the country, given the present deficit, is a very advantageous business. In the second place, when implementing depot repair of rolling stock, it must be modernized. Do not simply repair a railcar or a locomotive, but at the same time improve its individual units. This will give a tremendous economic effect, as compared with acquiring new railcars, especially since on that score there is a decree of the government which specifies that, when a large amount of equipment is reconditioned, the consumption funds can be increased to 30 percent.

The plants are now overloaded with intermediate repair of equipment, and if the depots took it on, there would be a double advantage to this. In the first place, there would be a more complete load of the depot's capacities, and consequently, a profit. In the second place, the plants would be oriented only toward major repair and modernization of equipment. Since the level of transport is not constant, and fluctuates in a range of 20 percent, some of the railroad workers could be used for these or other jobs, depending on the production need.

[Taburyanskaya] Are there already actual examples, proven by practical experience?

[Nikiforov] The Rostov Locomotive Depot, where contractual relations between the transport department and the labor collective were introduced, can be brought in as an example, particularly the operation of electric trains on contractual principles. The wages to maintain them and give them technical service are handled under the conditions of lease contracting, in which the locomotive workers and the dispatchers and the workers and cleaners and the station duty attendants and the division workers participate. Through the part of the revenue coming in that is at the disposal of the lessees, additions to their wages are made (for engineers and their assistants, for example, this is 300 rubles a month). The amount of the additional payment depends, not on the qualifications of the lessee, but only on the work contribution to ensuring high transport quality. Over half of the revenues are used to purchase materials and completing items. The remainder of the funds is accumulated on account, to acquire motor vehicle transport and build an apartment house.

As a result, the revenues of the division increased, the use of motorcar sections and the work time of the locomotive brigades improved, personnel turnover was reduced, and real perspectives for solving the housing problems appeared. Of course, the Rostov experiment needs to be perfected, but on the whole it merits attention and dissemination.

[Taburyanskaya] The last question. The workers of the locomotive and railcar depots often complain that the divisions are not interested in efficient use of rolling stock, but on the other hand, encroach on the revenues

obtained by the depot collectives for work not related to transport. What is the standpoint of the MPS on this subject?

[Nikiforov] This is actually happening. Many division directors do not appreciate the economic results from the decisions that they have made and pursue a plan at any price. The locomotive brigades and car workers see this, of course, and it evokes justified criticism from them. The ministry has recommended that the divisions make a transition to interrelations with the structural subdivisions using contracts. Many roads, however, pay no attention to these recommendations. I think that implementing this situation is one of the priority tasks in our sector.

### Workers' Wages, Rail Tariffs Discussed

914H0171A Moscow GUDOK in Russian 7 May 91 p 1

[Article by V. Chistov: "Wages Have Been Raised for Railroad Workers: The Social Conflicts in Labor Collectives Can Be Solved Without Strikes"]

[Text] More than a month has passed since the day the union government's decree on raising retail prices for food and industrial products was published but the social and political tension that this action evoked has not abated—although, it would seem, all of us were informed in a timely fashion about the coming measure and everyone, in the end, was convinced that price reforms were necessary and unavoidable with the shift to a market economy. The only question was how to do this in the least painful manner for the majority of the population.

Nevertheless, the people felt themselves deceived. They persistently tried to convince us that a price increase averaging 70 percent was being planned, that all the assets obtained as a result of this measure would go to compensate the population's lower paid category primarily, and that workers would win from the reform while shadow economy operators would suffer.

The reality, alas, was far from these optimistic assertions. The prices for produce and basic necessities grew threefold-fivefold and more—and these are fixed ones! However, free and contract ones could not evoke any other reaction except bitterness and resentment among people who are accustomed to living on work savings. The main thing is that the hope that goods would finally appear on store counters with the price increases was not justified—not at all. As before, people were compelled to purchase them in markets and all kinds of "flea markets" at profiteering prices. Moreover, the black market immediately reacted to the Cabinet of Ministers action with repeated price increases. The number of people on the edge of poverty correspondingly grew manyfold in a flash. The measures, which a number of republics hastily took to soften the blow the reform inflicted, did not help.

One thing is inexplicable: Why should workers pay for errors made by the country's leaders? Should one be

surprised that they reacted to this with the miners' protest, which has been unparalleled up to now in its mass nature and duration, and with the unrest that seized very wide sections of the population in Belorussia. Of course, with our economy as shaky as it can be, strikes are far from the best method of combat. They represent a method that leads into a blind alley. Under these conditions, the railroad workers, who did not halt production in spite of everything, recognizing quite well that the halting of transport operations would mean the final paralyzing of the country's economy, displayed a genuinely high patriotic consciousness—although rail transport's economic situation is perhaps even more difficult than in the coal industry or other leading branches.

It is no accident that trade union leaders were subjected to humiliating criticism during the 25th branch trade union congress because they had not obtained social protection for rail workers from the government for a long time. As a result, many urgent production and social problems had not been resolved for years and the wage level of the workers on the steel mainlines were considerably lower than those of workers in other branches. During the Third Independent Trade Union's Central Committee Plenum, railroad workers also gave concrete instructions to the branch's leaders (and this is written in the plenum's resolution) to obtain a wage increase of no less than 50 percent this year. This order became especially urgent after the retail price increase. The ministry along with the trade union displayed enviable persistence and performed simply gigantic work in order to carry out the railroad workers' order.

As a result of long and difficult negotiations with the union government, Prime Minister V. Pavlov signed a USSR Cabinet of Ministers decree on 3 May entitled "On Additional Measures To Attach Personnel And Stimulate Work At Ministry of Railways Enterprises."

In order to bring the essence of this decree to all railroad workers more rapidly, a network selective meeting was held on 6 May. The commanders of the railroads, divisions and transport enterprises and representatives of labor collectives and public organizations participated in it. Members of the Ministry of Railways Collegium and the trade union's Central Committee Presidium, the chiefs of the main administrations and the ministry's leading specialists were in the ministry's workshop. N. S. Konarev, the minister of railways, conducted it.

In revealing the content of the decree that was adopted, N. S. Konarev informed them that in order to insure the steady operation of the railroads, satisfy the shipping requirements of the population and national economy and establish additional incentives for labor productivity, the USSR Cabinet of Ministers had granted the Ministry of Railways the right to increase for its subordinate enterprises the base amount of assets directed toward consumption by an average of 40 percent, considering the distinctive features of the branch, and had charged the ministry and the branch trade union's Central Committee to develop recommendations for the

differentiation and use on the railroads of the additional resources allocated to the wages of workers in the basic professions, keeping in mind their working conditions.

Let us note that such recommendations were also passed to the production commanders at the selective meeting. Thus, it is proposed that the wages of people, who spend their major work time traveling (locomotive crews, refrigerator specialists, passenger train conductors, Armed Security Administration riflemen, and others), be increased by 80 percent (considering the measures already adopted this year by the ministry and on the railroads, they will grow 100-110 percent, that is, two-fold); of railroad workers directly connected with organizing the movement of trains and the repairing and maintaining of track and other facilities, rolling stock, dispatching equipment, etc.—60 percent; and of the remaining personnel—40 percent. Let us emphasize however, that these are only recommendations; the directors on the spot have been granted the right to decide themselves by how much and for whom wages will be increased, considering local conditions, the intensity of work, and the specific nature of the work of this or that enterprise or division.

Concerning subway workers, the USSR Cabinet of Ministers decree recommended that the governments of the union republics and the ispolkoms of city soviets of people's deputies look for assets to increase wages to approximately the level established for rail transport enterprises.

In order to compensate for the additional expenditures connected with the railroad workers' wages, the tariffs for freight shipments in direct rail service are being increased by an average of 50 percent on 1 May except for the tariffs for food shipments and freight for agriculture. In commenting on this point in the decree, N. S Konarev pointed out that the assets obtained from the increased tariffs will become the main source for providing the new wage level. This means that strict control must be established on all railroads and divisions and at freight dispatch and destination stations so that the payment for shipments is collected strictly in accordance with the decree and that other products are not dispatched as freight for the villages using the preferential tariffs. Only in this event will it be possible to count on the successful solving of social questions. Of course, it is also necessary to be concerned in every way possible with increasing shipping volumes.

Raising wages is only the first step in removing social tension on the railroads. The Cabinet of Ministers decree recognizes that it is necessary to conclude a rail transport tariff agreement for 1992 before 1 June—an agreement that would, in particular, provide for measures aimed at satisfying the shipping requirements of the national economy and the population, further increasing tariff rates and position salary rates including increments in them, providing payments of a compensatory nature, differentiating wage levels based on territory, paying a one-time reward for faultless work without accidents and

defects over the course of a year, and increasing the amount of compensation for long service and that based on the results of the year's work. It is also recognized that it is necessary to begin in 1992 a radical reform of wages in rail transport so that they will become, in the final analysis, a common standard for the price of manpower. To do this, a trilateral commission is being established, in which competent representatives of the ministry, the trade union Central Committee and central government agencies will participate.

Let us add to what has been said the fact that another order of the rail workers is being successfully solved—they have managed to expand the list of worker categories which are being granted additional pension support privileges: At the present time, up to 40 percent of operating personnel will retire when they reach 55 years of age (for women—50) and earlier.

In summing up the results, one can say that a decision has been adopted for which the ministry, the trade union Central Committee and, especially, the railroad workers themselves fought persistently and long. They managed to achieve this not at the cost of strikes but thanks to negotiations. This is the way it should be in the civilized law-governed state toward which we are all moving today.

Even today, however, transport has quite a few problems awaiting solution. The shortage of assets in the branch remains significant even after the adoption of the USSR Cabinet of Ministers decree. Approximately 10 billion rubles are lacking for rolling stock, rails, ties, spare parts, and other materials required for the normal operation of the railroads. It is not worthwhile to count on the state fully providing them.

That is why it is necessary to put all resources existing on the railroads into operation. Here, the experience acquired on the Central Asian and Gorkiy mainlines and a number of others, where programs for concrete measures to improve their financial position have been developed in each line enterprise, is very valuable. On the Gorkiy, the profits from increasing additional services to the population and from expanding subsidiary auxiliary activity have grown twofold during the first four months of this year in comparison with the same period of last year. There, they are continuing persistent searches for additional reserves—as market conditions dictate. This is the way it should be everywhere! You see, in the end, your and our prosperity and the prosperity of the entire branch will depend only on our common constructive labor.

#### **First-Quarter Rail Safety Statistics Issued**

914H01704 Moscow GUDOK in Russian  
14 May 91 p 2

[Materials of the Ministry of Railways: "The Price of Negligence: Traffic Safety Results of the First Quarter"]

[Text] In the first three months of the year, 19 railroads had 25 wrecks and 11 accidents (in the first quarter of 1990 there were 28 wrecks and 13 accidents). The largest number of them were on the Gorkiy (three wrecks), the Azerbaijan (three wrecks and an accident), the Kuybyshev (a wreck and two accidents), the Moscow (two wrecks and an accident), and also the North Caucasus, Krasnoyarsk and Tselina (two wrecks each).

The collectives of 13 roads worked without wrecks and accidents in the first quarter. Among them were the

October, Central Asian and West Kazakhstan, which were formerly included in the number of roads having accidents.

The number of passenger train wrecks and accidents, as compared with the same period last year, was reduced by a factor of 1.5, but this should not be reassuring, particularly for the collectives of the Southwestern, North Caucasus, Volga, Moscow, Kuybyshev, Transcaucasian and Kemerovo roads, where two passenger trains had wrecks and six had accidents.

	Wrecks		Accidents	
	1990	1991	1990	1991
TOTAL:	28	25	13	11
of them, with passenger trains	4	2	8	6
BY ROADS				
October	5	—	1	—
Moscow	2	2	1	1
Gorkiy	—	3	2	—
Northern	1	1	—	—
Southwestern	—	1	—	—
Moldavian	—	1	—	—
Southern	—	—	2	—
Lvov	1	—	—	1
North Caucasus	1	2	1	—
Azerbaijan	2	3	—	1
Transcaucasian	1	—	—	1
Southeastern	—	1	2	1
Volga	1	1	—	3
Kuybyshev	3	1	—	2
Alma-Ata	1	1	2	—
Sverdlovsk	—	1	—	—
West Siberian	—	2	1	—
Kemerovo	—	—	—	1
East Siberian	2	1	—	—
Krasnoyarsk	—	2	—	—
West Kazakhstan	1	—	1	—
Tselina	2	2	—	—
Central Asian	2	—	—	—
South Urals	1	—	—	—
Transbaykal	1	—	—	—
Baykal-Amur	1	—	—	—

The number of instances of defective parts in train and shunting work on the road network was reduced by 6.6 percent because there were fewer collisions and derailments of rolling stock, less damage to locomotives and fewer cases of railcars being uncoupling from freight trains due to hot boxes.

Ensuring traffic safety at railroad-highway crossings remains the most critical problem. The main cause is violation of the rules of road traffic by motor vehicle drivers. For example, collisions between buses and trains had serious consequences on the Transcaucasian, North Caucasus and Lvov roads.

Breaks in the rails and elements of railcar running gear, going through stop signals and various types of track disrepair were the predominant reasons for the wrecks.

The cases of going through stop signals are particularly alarming. There were 30 of them, with four (on the Alma-Ata, Azerbaijan and Gorkiy roads) leading to wrecks.

We should be alert to the sharp increase in the number of breaks in wheel pairs (37 cases as against 14 in the first quarter of 1990). These occur mainly under gondola cars. Half of the broken wheels had old fatigue cracks—the result of considerably overloading the cars with coal (Tselina, Kemerovo, Northern, Krasnoyarsk), metal and ore (Moscow, Tselina, Moldavian, Kemerovo, Southern, Volga and others). Uneven rolling was discernable in over half of these wheels.

There is no improvement in the technical state of the passenger car fleet. Some 69 cars came uncoupled from passenger trains en route because of malfunctions (in the first quarter of 1990—42).

Drifting of rolling stock has hardly been reduced.

It should be noted that the network had not a single case of the drifting of rolling stock attached with UTS (a development of the VNIIZhT [All-Union Scientific Research Institute of Railroad Transport]). These devices are being introduced extremely slowly, however.

There has been an increase in the number of cases of receiving and dispatching trains along routes that are not ready. Half of them were permitted by transport service workers.

Most of the violations of traffic safety occur because of the poor level of discipline and erroneous actions of workers directly connected with train traffic.

For example, on the night of 12 March, when a freight train was traveling along the Shushkodom-Ratkovo main line of the nonelectrified Vologda-Buy section of the Northern Railroad, equipped with automatic interlocking, a self-uncoupling occurred (due to a car with one bogie derailing). Engineer Yu. Ukhabov (Buy locomotive depot) sent his assistant to find out the reason for the brakes being actuated. The assistant, engineer V. Vasil'yev, arrived at the last car remaining in the consist and, without checking for the presence of a signal, and without verifying the number of the end car, closed the brake end cock. When he returned to the locomotive, he reported to the engineer that they could go on. And 21 railcars were left on the main line.

L. Smirnov, the duty attendant at the Shushkodom Station, without making sure that the train had arrived with a full consist, although he knew about its enforced stop on the main line, had dispatched a freight train in the opposite direction. The result was—the collision of the train and the uncoupled rolling stock and the derailment of five cars. The locomotive brigade miraculously escaped.

On 5 March, on the Nanchkul-Ala-Tau main line of the Abakan Division of the Krasnoyarsk Railroad, V. Sychev, road foreman, and V. Karaushev, senior road foreman (Askit subdivision of the track) were making an on-site inspection of the rails. In this case they did not take any particular trouble: they did not clear the snow from the rail foot at the danger spots and did not make sure that the snow was not pressing. The night before, according to the schedule, N. Filimonov, deputy chief of the subdivision, should also have checked this main line. He should have, but he had not got around to it. On 10 March, a freight train was wrecked here because of the expanding of the track (snow was pressed under the rail foot). Twenty-one cars of ore were derailed. Traffic was interrupted for over 22 hours.

### New Minister Surveys Aging Rail Fleet

914H0172A Moscow GUDOK in Russian  
21 May 91 p 1

[Article by A. Loginov: "The Urban Railway Asks for Help: From a Meeting of the MPS Collegium"]

[Text] The readers of Gudok will remember the material printed in the newspaper eight years ago under the heading, "Kto pomozhet elektrichke?" [Who will help the Urban Railway?], which later became the rubric for a whole series of publications on this theme. It aroused widespread public response: after all, hundreds of thousands of our compatriots daily ride to work and back again on suburban trains. They ride, often standing up in overcrowded cars and vestibules. A few stops before the point of destination, they literally take them by storm.

What conveniences can you speak of here—just to "get there" and not be late for work. This often happens, because the urban trains get off schedule or are canceled for technical and other reasons. Incidentally, these other reasons are by no means less important, and recently even alarming: the operators of electric trains and their assistants cannot stand the tense pace, and transfer to a sector where the work is both calmer and better paid.

As is proper, this was the topic of conversation at the last meeting of the MPS [Ministry of Railways] Collegium, in which the directors of a number of roads, electric rolling stock repair plants and the corresponding main administrations participated. In opening it, L.I. Matyukhin, minister of Railways, noted that the problems of suburban transport were truly urgent. The impression was created, however, that the resolutions adopted concerning it were not being fulfilled, and that was why they had to be periodically revised.

"This is, for me, the first collegium in my new capacity," said the minister. "I have especially familiarized myself with the documents of the former ones, which took place in 1989 and in 1990, and now this year on 14 February. Therefore, let me speak with the utmost clarity: what is not being carried out, why, and how to correct the situation."

Yes, he is right, and you probably cannot make the accusation of inaccuracy in the positions of the main speakers, the directors of the main administrations, A.N. Kondratenko of Locomotives and Yu.V. Krasnov of Plants, and the other speakers. But B.D. Nikiforov, deputy minister, who had taken the floor before them, depicted the situation as critical. Today, about 20 percent of the fleet of electric trains is operating past the limits of normal service life (28 years), and by 1995, it will approach 50 percent.

This is on the average. On the Northern Road, 100 percent of the cars in suburban traffic will be operating over the allotted period, on the Sverdlovsk—98, the Dnepr—95, the Donetsk—74, and the October—25 percent. It is not difficult to imagine that if even some of them come to a halt (about four billion passengers a year in our country are transported by suburban trains, with over nine-tenths transported by electric urban trains), major industrial regions will be paralyzed. After all, for example, four million persons a day use them at the Moscow junction.

Really, it is time to advertise this extraordinary situation. It did not arise today, nor did it arise yesterday. With the yearly estimated need for 1,800 railcars (and last year the road orders exceeded 3,300), industry supplies less than 500. What kind of updating of the fleet of electric rolling stock can you talk about, if we have one railcar-building plant, located in Riga, for the whole vast country? The other plant, supplying it with equipment—electromechanical—is there, too.

Five years ago, on 29 May 1986, a government resolution was adopted on rebuilding the Riga Railcar Building Plant and the Demikhovskiy Machine-building Plant (in the Moscow suburbs), in order to bring the yearly output of electric cars up to 1,100. The first consignment of them should arrive this year, but the periods for introducing the facilities have been constantly disrupted, and during these years the construction-installation work was only half fulfilled.

If a miracle happens, and we throw all our forces and resources into the Demikhovskiy Plant and it begins operation tomorrow, or in a month, the urban trains will not increase because of this. The point is, that it was calculated for the output of motorless trailer cars. To increase the output of motorized cars, the electric equipment must be supplied by that same Riga Electromechanical Plant. The resolution to rebuild it was adopted several months later, in 1986 as well, but not a ruble of the funds allotted for this purpose was utilized. The Latvian government is in general posing the question of production cuts at this enterprise.

It is not hard to imagine the threat here. Here, it has long been time, not for the MPS collegium, but for the Cabinet of Ministers to decide which electrical or defense industry enterprise should be quickly respecialized or where to organize the production of completing

items for electric trains in order to keep the situation from becoming truly supercritical.

Meanwhile, at the MPS, and at the meeting of its collegium, specialists wracked their brains to find a way out of the situation, which has become acute. The three months that have passed since the talks in February on this subject have not increased their optimism.

It was under these conditions, then, that the collegium discussed the draft of the ministry's prepared order "On Measures To Improve the Technical State of the Electric Train Fleet," setting forth a program for increasing the volumes of repair under depot and plant conditions. To put it briefly, because of the chronic, ever-increasing shortage of new cars, it will be necessary to patch up and rebuild the old ones.

It is not an easy task. It was not by chance that the minister postponed adoption of the resolution. On the one hand, let the directors of the repair plants and roads on which they are located weigh the potentials at the sites once again. On the other hand, he and the USSR People's Deputies must seek advice from the parliament of the country and from the Cabinet of Ministers. The situation is too serious.

#### Railway System Modernization Needs, Budget Constraints Viewed

914H0170B Moscow GUDOK in Russian  
18 May 91 p 2

[Article by Nikolay Davyдов: "In the Interest of the State: Do Not Let the Rebuilding of the Railroads Fail"]

[Text] According to the data of USSR Goskomstat [State Committee for Statistics], in the four months of this year the drop in production, as compared with the corresponding period last year, was 5.4 percent. The serious position has affected the coal, metallurgical and chemical, and a number of other industries in the sector. The situation on the consumer market is virtually unchanged. A reduction is observed in the production of agricultural goods and equipment for railroad transport.

After all, we know that not a single sector of the national economy can develop efficiently without periodic updating of worn out fixed capital. This does not exclude railroad transport. Without the introduction of the achievements of scientific-technical progress and an improvement in the technology of the transport process, it will be impossible to ensure the efficient work of the country's entire transport conveyor.

Unfortunately, transport's outfitting with modern technical devices lags seriously behind the need. Alongside the newest models of equipment, which completely conform to the achievements of science, a great deal of worn-out and obsolete machinery, mechanisms, etc. are being operated. For example, about 6,000 electric locomotives with obsolete construction are in operation on the electrified routes. About 80 percent of the freight

turnover is carried out on the diesel traction polygon by diesel engines of the first generation, developed as far back as the 1950's and beginning of the 1960's. One-fourth of the entire freight car fleet should be replaced. The need for modern electric rolling stock for suburban transport is only 40 percent satisfied.

These and many other facts are well known, not only to railroad workers, but also to the directors of the legislative and executive authorities of the Union and the republics. True, the attitude toward them in the sector, and if it can be expressed in this way, "from the outside" is by no means the same. The transport workers counted greatly on the implementation of the Program for Re-equipment and Modernization of the Railroads, which in its initial variant specified a substantial growth in the supply of technical devices. The budget deficit and the drop in industrial and construction production, however, led to a noticeable lowering of the level of good intentions. At best, one-third of the equipment required for normal work is coming from outside. The USSR Cabinet of Ministers is calling for compensating for the rest through better use of internal reserves.

A good deal of time and capital investments is needed, in order to avoid a further deterioration in the state of the technical devices. This requires, specifically, introducing the newest repair technology and ensuring increased service life for the parts and units used in locomotive, railcar, track and other services. The level of reliability of the equipment, protection against corrosion of the structures and equipment and the parameters of the equipment for automated control systems must be raised to a new level, and this includes the need to develop new generations of automated systems.

Is this task within the power of scientists, designers and a few enterprises of the sector, on the basis of which this modernization can be carried out? Without claiming to an exhaustive answer, let us try to give a sensible evaluation of the actual potentials of transport science and practical work under the conditions of the present unbalanced state of material-technical supply and the financial position of transport.

I have often heard, at collegiums of the MPS [Ministry of Railways] and various meetings, sharp criticism of sectorial science. Indeed, by no means all transport enterprise directors are investing sufficient funds in the cause of scientific-technical progress. Although the scientific organizations mainly fulfill their research and design work promptly and at a sufficiently high level, introduction of their developments runs up against difficulties in provision with resources, an experimental base, and many other matters. The main thing is that neither the buyers of the scientific-research and experimental design work (main administrations) nor the scientific organizations themselves bear strict responsibility for the use of new technology, systems or technical devices.

A ruinous practice has formed: MPS control over promoting a useful innovation stops after its introduction at

the base facilities where it is manufactured. Further rates of introduction are on the whole on the conscience of the road directors. A graphic example is the ShchOM-MF ballast-reclaiming machine, manufactured by skillful Pridneprovskaya workers, which the network's track workers urgently need. Five of these machines were manufactured on the home main line as far back as the middle of the 1980's, but beyond its limits they can be counted on the fingers of one hand, despite the repeated directives of the MPS.

According to rough estimates of the VNIIZhT [All-Union Scientific Research Institute of Railroad Transport], in the last five-year plan, the sector could have obtained about 500 million rubles [R] profit if the developments of this institute alone had been introduced everywhere. Other scientific research institutes and design bureaus certainly have statistics like these, as well.

At one time, the MPS took steps to bring the scientific-design and production collectives closer together. Beginning in 1986, in order to accelerate the introduction of intensive technology, highly productive equipment and devices for mechanization, road design-technological bureaus (DKTB) began to be set up. Some 28 main lines already have them. The DKTB have confirmed the expediency of their creation and have shown their vitality and the high efficiency of their developments. Suffice to say that in the past five years, they have manufactured and put into effect over R280 million worth of technical products.

For example, the DKTB of the Alma-Ata Road is actively assisting the mainline directors in solving urgent problems for the road, in particular, increasing the work efficiency of track machine station collectives carrying out capital and intermediate repair of the rails.

Railroad workers have many good things to say about the DKTB of the Belorussian Road, which is specializing in developing a system of centralized traffic control, not only for itself, but also for other roads of the network, in particular the Baltic and Tselina. Advanced technology to reinforce and recondition rolling stock parts, ensuring their increased reliability and durability, is being actively developed and introduced here. One example of this technology is a method of inductive accumulation, approved under actual conditions.

There are also encouraging examples in the work of the DKTB of the Dnepr, West Siberian and a number of other network roads.

With all due respect to the work of these and other DKTB, however, one cannot help but see that they do not encompass even a small number of the strategic problems built into the Program for Re-equipment and Modernization of Transport. The fate of the sector, the perspectives for its development and the needs of scientific-technical progress cannot be inserted into the modest budget framework of these organizations. The reality is such that it is difficult even to imagine the whole picture of a rise in the level and quality of

transport work in the present situation. Furthermore, under the conditions of the transition to a market economy, transport, remaining State property, may find itself no better off than before, because of the critical financial situation. After all, the transport volume is dropping, and consequently, the revenues and profit are being reduced. Which of its internal funds for modernization can be the topic for discussion?

It is hardly worth counting seriously on compensation for these losses through expanding transport services and subsidiary-auxiliary and commercial activity. They might cover or at least reduce the existing nonproductive expenditures. Not to mention the fact that for reasons known to everyone, the roads' expenditures for diesel fuel, electric power and virtually all material resources are growing rapidly.

One is forced to ask the question: still, who needs this modernization of railroad transport, and is it necessary at all? After all, it is no secret that in the course of the last four decades, the sector has regularly made a substantial contribution to the country's budget, and in return has received, instead of the necessary investments, specious decrees of the CPSU Central Committee and the government, which are completely, or almost completely, unsupported by the industrial potentials. Not a single ruble has been or is being directed at this time toward the development of our republic's transport. Do railroad workers really transport freight just to satisfy their own needs?

Recently, appeals to give agriculture its due have been heard, time and again, from the rostrums of Union and republic congresses, sessions and conferences of the highest rank. This is taken as it should be: if there is nothing to eat—there is no other way out. So should transport really come to a halt, in order to make the country realize that it is not in a position to develop normally? After all, it is estimated that late and irregular transport of raw material, fuel and finished products—including those for agriculture—is costing the State yearly losses of R12-14 billion! This is to a considerable extent happening because the sector is lagging behind in technical development.

How can one fail to recall here the pronouncement, which flashed through the press the other day, of V. Pavlov, head of the LIIZhT [Leningrad Institute of Railroad Transport Engineers], that with the existing system of financing, it is doubtful that the Program for Re-equipment and Modernization of the Railroads will be put into effect before the year 2000. According to his estimates, communications and rolling stock are now 60 percent worn out, and the USSR Cabinet of Ministers promises to allot only 30-35 billion for the realization of the program, instead of the 150 billion needed. This, even though the above-mentioned losses from transport amount to precisely the latter sum to the end of the century!

One does not have to be well grounded as an economist to draw an unequivocal conclusion from everything that has been said. In the interest of the State, the outlined Program must not be permitted to fail—because the country's entire economy rests on transport. Since that is true, the support should be a priority matter. Otherwise, the breakdown of the entire economy is inevitable, be it socialist, market or whatever else you like.

#### Railway Automation Problems Highlighted

914H0169B Moscow GUDOK in Russian 8 May 91 p 2

[Article by Yu. Beloborodov, chief of the Far Eastern Railroad's department for the shipments automated operational control system: "So That The Computer Will Not Be 'Mistaken'"]

[Text] Khabarovsk—One can freely describe the last five-year plan as a time of transition to new methods for managing the shipping process. On our Far Eastern, 55 stations and four divisions have been included in the railroad's automated system during recent years. Moreover, information arrives here from junction stations. An inter-machine exchange of data with the Transbaykal and Baykal-Amur railroads' computers, the Ministry of Railways Main Computer Center and the Vostochnyy ports's automated control system has been set up.

Approximately 500 waybills are inputted daily into the machine—embracing 97 percent of all freight traffic. This has permitted the technologies for working with the stations to be changed considerably. The transmission of information by telephone has been reduced because the dispatcher's set receives practically all the data regarding the composition of trains and their movement from us; and the departments and services—summaries. An opportunity to present the details of the operational information has appeared. The monitoring of the movement of any train, locomotive, railcar, and freight without the help of line workers has been set up.

Nevertheless, the information from the computers is still not being fully used. The reason is understandable: it is necessary to work quite a bit at the stations in order to obtain complete and reliable information. At times, we receive only part of the data concerning a train, railcar and locomotive and incorrect information, for example, about the destination station and the hub and recipient codes.

The reasons for the deficiencies lie in individual workers violating the rules for transmitting information for computers and in the absence of technical systems for preparing and transmitting the information. Only administrative or economic methods, that is, punishments or payments, can correct this. Unfortunately, we are still basically using administrative measures. You see, increasing the accuracy of the information would permit shipping technology to be substantially changed today based on the established train model—automating

the calculation of locomotive and railcar park operations on sections and issuing operational paperwork on train and freight operations.

Of course, one can completely solve the problem of information reliability. Personal computers at work positions not only to process primary documents but also to prepare and transmit data to the railroad computers are required for this.

It is already evident today that our automation strategy was incorrectly selected. By establishing computer centers in the Ministry of Railways and on the railroads, we did not automate the processing of primary documents at stations and enterprises. This means that it is necessary to rewrite the data from the documents manually and transmit the information manually over the teletype. Naturally, there are the inevitable mistakes when doing this. The automated control systems at the marshaling stations help but they do not solve the problem for the network.

The system's further expansion should be achieved by solving new tasks. It is necessary to develop a whole series of models. In order to calculate work time and rest, a locomotive crew model is required. In order to monitor the condition and location of each railcar accurately from its acceptance at a station and section to its handing over to neighboring railroads, a movement calculation and container condition model is needed. All of this will require the automation of work positions. The complex system for automating work positions (KSARM) will assist in monitoring the use of tracks and the movement of railcars at stations. The automating of commodity cashier work positions at all stations and container points will permit the transition to paper-less technologies for shipments of railcar freight and in containers and combination railcars.

There is another problem: for decades, we have performed work on a system for the automatic read-out of information (ASI) from the rolling stock. Great hopes were placed on it for raising reliability. However, is it necessary? The mission of this system is to check for the presence of railcars in a train. However, without knowing information about the railcars (number of axles, weight) it is impossible to dispatch a train from a station in accordance with traffic safety requirements. This means, the ASI has only a monitoring function. For this, it is necessary to equip each railcar with a data transmitter (if there is no data transmitter on even one car, including a leased car, the operators will have to check the correctness of the information). Receivers are needed on each monitored station's entrance and exit track (with an obligatory converter of the pulses into information and a communication channel to the computer).

As we see, the expenditures on establishing an ASI with only a monitoring function—and this is hundreds of millions of rubles—are not being repaid. This means that one must travel along a different path in order to obtain

dependable information—automating work positions and making broader use of personal and electronic computers.

#### **Trans-Siberian Rail Line Centenary Noted**

*914H0173A Moscow PRAVDA in Russian 24 May 91  
Second Edition p 6*

[Article by A. Batygin and A. Streltsov: "A Dollar For The Trans-Siberian"]

[Text] The longest railroad mainline in the world is celebrating its 100th anniversary. On 1 June 1891, the first stone of the local railroad terminal building was laid in Vladivostok during a festive occasion. Thus the construction of the largest railroad on our planet—the Trans-Siberian mainline—began its countdown.

Only Russian specialists built the railroad—and out of native materials. In individual years, up to 90,000 people worked at one time on this truly great construction project. The basic tools of that time were shovels, pickaxes, and wheelbarrows. They brought and carried away the construction structures, other goods and soil using teams of horses. The Trans-Siberian workers lived in earth houses and barracks. Epidemics often arose.

Nevertheless, the mainline knew no equals based on its construction rates. In less than 15 years, more than 8,600 kilometers of steel track were laid; dozens of bridges were built across the Ob, Lena, Yenisey, and Amur; and tunnels were punched through the thicknesses of mountain ranges. In one Krugobaykalskiy section alone, it was necessary to build over a distance of 258 kilometers 39 tunnels and 50 galleries to protect the railroad from landslides and rock falls.

The railroad marked the beginning of Siberia's and the Far East's economic development. The mining of minerals, coal, timber, and gold increased here. New industrial cities sprang up along the route and the stream of migrants to the previously uninhabited regions increased.

Today's Trans-Siberian is undergoing a second birth. A steel backbone 10,000 kilometers long connects Brest and Vladivostok. A total of 50 passenger trains are dispatched daily from Moscow to the Urals and beyond. The Rossiya train covers the 9,300 kilometers from the capital to the "very edge of the land" in 142 hours on the longest passenger line in the world. Passenger trains and individual railcars of the Moscow-Beijing, Moscow-Ulan Bator, and Moscow-Pyongyang international communications lines ply the Siberian mainline. Freight shipment volumes are considerable: they reach 100 million tons a year on individual sections of the Trans-Siberian.

The Trans-Siberian is, first of all, a unique construction project connecting Europe with the Far East, Japan, China and the countries of Southeast Asia. Today, transit freight is carried across USSR territory from Asia to the Old World and back. Let us take container

shipments. The Trans-Siberian container service has already been operating for many years and gathering strength. Up to 100,000 loaded containers a year are transported on its European avenue.

V. Butko, USSR deputy minister of railways, says: "Such organizations as the Ministry of Railways Zheldoreksport foreign trade firm—an operator of direct shipments—and the Eurasia Transport, Inc. joint enterprise, which has combined an association of Soviet railroads, the Soyuzvneshtrans concern and the Leningrad transport association as shareholders, now participate in transit shipments."

It is understandable that further expansion of Trans-Siberian container service will require the additional attraction of foreign investments for its equipping and the introduction of advanced methods and technologies for transporting freight. A new and reliable partner has appeared for Eurasia in the person of Sea Land Service, Inc., the largest American corporation in the world.

The Ministry of Railways has told us that, besides the practical cooperation of Soviet railroads, there is another splendid opportunity for joint activity on the Trans-Siberian, which also promises quite a bit of benefit—we are talking about the organization of foreign tourism in our country's eastern part, especially in the BAM [Baykal-Amur Mainline] zone. Unique corners of primordial nature have been preserved here. One can admire rivers and lakes that are still clean, visit a genuine wilderness, and fish and hunt to one's heart's content. In the beginning, comfortable trains will be put at the tourists' disposal but, in the future, tourist hotels will be built as the region develops.

These days, the Rus train, which the Soviet Inpastrans firm has organized, arrives in Moscow from Vladivostok. American businessmen travel in cars designed in the "old style"—with velvet and plush. The businessmen intend to determine the possibilities for using the mainline.

The Paris-Warsaw-Moscow-Tokyo tourist train of the well-known Swiss Interflug firm recently traveled over the Trans-Siberian. The interest of business people and directors of foreign tourist offices and organizations for fascinating trips is growing. This cooperation is undoubtedly also beneficial to the Soviet side.

The best way to celebrate the Trans-Siberian's centenary is to take a trip along the multi-kilometer route; visit the Urals, Siberia and the Far East for slightly more than a week; and scoop water out of the Pacific Ocean. The Ministry of Railways has organized such a trip for Soviet and foreign journalists representing Japan, China, the United States, Great Britain, and Germany. A special train with very curious passengers from the writing and picture-taking community will depart the capital's Yaroslavskiy Terminal on 7 June. There will be a team from PRAVDA.

We will endeavor to describe their impressions of the trip on our newspaper's pages.

## MARITIME AND RIVER FLEETS

### Pavlov Attends Talks on Leningrad Docks, Shipping

*LD0206174191 Leningrad Maritime Service in Russian  
1400 GMT 26 May 91*

[Summary] At the end of last week Viktor Ivanovich Kharchenko, head of the Baltic Maritime Shipping Line, and Anatoliy Aleksandrovich Sobchak, chairman of the Leningrad Soviet, had a two-hour conversation with Valentin Sergeyevich Pavlov, chairman of the USSR Cabinet of Ministers, in the presence of Yuriy Mikhaylovich Volmer, minister of the maritime fleet, on the following topics:

1. The need for the new port at Luzhskaya Guba will increase as freight flow increases through the Leningrad free economic zone. The first task is to build the berths of an oil transportation port for the transhipment of oil and petroleum products, then to build a dry cargo port, a port for bulk freight, and a container terminal. The port will be able to process up to 150 million cargoes per year. It is also proposed building a fishing port, a ship repair works, and a plant for the construction and repair of containers. It is predicted that Leningrad will be relieved of transit loads forwarded by vehicular and rail transport, improving the ecological situation.

At least five billion rubles [R] will be required for the port. The Executive Committee of the Leningrad Oblast and City Soviet, the Kingisepp Town Soviet of People's Deputies, the Baltic Maritime Shipping Line, the Kirishi oil refinery, the Slantsy combine, and Lenmorniprojekt have founded the port joint stock company.

On 14 June, at a sitting of the USSR Cabinet of Ministers, proposals prepared by Lenmorniprojekt on the construction of the Luzhskaya Guba port will be discussed.

2. The government has not paid the Baltic Maritime Shipping Line for the transportation of imported goods for five months and has run up a debt of R270 million. Kharchenko, as chairman of the conference of Baltic shipowners, has proposed holding a meeting either in Leningrad or in Tallin to discuss this problem in early June with his fellow shipping chiefs.

3. The Baltic Maritime Shipping Line chief complained that the RSFSR Council of Ministers promised to look into the question of acquiring the Bremer passenger ferry from the FRG, but it had buried the matter. The Ministry of the Maritime Fleet had also put obstacles in the way regarding the purchase. Pavlov promised to look into the matter.

**TRANSPORTATION****JPRS-UEA-91-028**  
**13 June 1991**

4. "Having taken credit under guarantee of the government of \$800 million, the USSR Ministry of the Maritime Fleet ordered 10 container vessels, each with a 2,660-container capacity, from German dockyards. The MV Vladivostok, the first of the series, was commissioned on 22 May, and the flag was raised on her. However, instead of replenishing our maritime fleet, this vessel has been chartered to our West German competitor, Senator Line.

"It turns out that at our expense, a fleet of foreign companies is being boosted. This is political nonsense, absurdity, stated A.A. Sobchak, if we forget about a fleet for ourselves, then in the near future we will start paying billions of hard currency for freight transport. The

chairman of the Leningrad Soviet also promised to raise the question of the so-called deal of the century, struck by the Ministry of the Maritime Fleet to the detriment of our country's maritime fleet, at the USSR Supreme Soviet."

5. In reply to Pavlov, Kharchenko said that two German firms are willing to supply all the requisite plant for cutting up ships and packaging them as scrap for 11 million [currency not specified]. It is proposed setting up a small-scale enterprise for the cutting up of written-off vessels under the department of rescue, ship raising, underwater, and towing work, as in two or three years the writing off of ships will intensify.

**END OF**

**FICHE**

**DATE FILMED**

21 June 1991